

**QUARTERLY REPORT
QUARTERLY PERIMETER AIR MONITORING REPORT
HUNTERS POINT SHIPYARD, PARCEL B
SAN FRANCISCO, CALIFORNIA
DELIVERY ORDER NO. 0109**

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Prepared for:

Engineering Field Activity, West
Department of the Navy
Naval Facilities Engineering Command
900 Commodore Drive
San Bruno, California 94066

Prepared by:

IT Corporation
4585 Pacheco Boulevard
Martinez, California 94553

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List of Abbreviations/Acronyms

CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CFR	Code of Federal Regulations
CLEAN	Comprehensive Long-Term Environmental Action - Navy
DoD	Department of Defense
EFA, West	United States Navy, Engineering Field Activity, West
EPA	United States Environmental Protection Agency
GC	Gas Chromatographic
HPS	Hunters Point Shipyard
HPLC	High Performance Liquid Chromatographic
IT	IT Corporation
IRP	Installation Restoration Program
metals	metals in suspended particulate matter
$\mu\text{g}/\text{m}^3$	micrograms per cubic meter
mps	meters per second
NPL	National Priority List
PAHs	polynuclear aromatic hydrocarbons
PAMP	Perimeter Air Monitoring Plan
PCBs	polychlorinated biphenyls
ppmv	part per million by volume
PUF	polyurethane foam
QC	Quality Control
RAM	real-time aerosol monitor
SVOCs	semi-volatile organic compounds
VOCs	volatile organic compound
§	Subsection

1.0 Introduction

As a function of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), IT Corporation (IT) was contracted by the United States Navy, Engineering Field Activity, West (EFA, West) to perform environmental restitution activities at Hunters Point Shipyard (HPS) located in San Francisco, California. (See Figure 1-2.) The portion IT is currently remediating is identified as Parcel B. (See Figure 1-1.).

In accordance with the "Draft Final Revision 1, Parcel B Remedial Design Document II, Technical Specifications/Drawings, Remedial Action Document, Hunters Point Shipyard, San Francisco, California" (Specifications), Section 01420 (Tetra Tech, et. al., 1998, hereafter referred to as the CLEAN Contractor), and at the direction of EFA, West, a perimeter air monitoring program was implemented. The objective of the air monitoring is to assist in protecting the public health of the nearby community and environment by documenting concentrations of specific air contaminants and comparing them to specified levels. Perimeter air monitoring is performed at Parcel B to identify any conditions requiring corrective measures necessary to assure that public health and the environment are not compromised as a result of the remedial activities. The Perimeter Air Monitor Plan (PAMP [IT, 1998a]) and the Specifications (Tetra Tech, et. al., 1998) require quarterly reports summarizing air monitoring data for the quarter.

1.1 Report Format

This Quarterly Perimeter Air Monitoring Report provides a description of the air monitoring network and summarizes monitoring results for the fourth quarter of 1998 (October 1 through December 31, 1998). The report sections are described below.

- Section 1 provides an introduction to the report.
- Section 2 provides background information, including a description of the site and a summary of historical use of the site.
- Section 3 provides a summary of the air monitoring program and the results of air monitoring and sampling.

- Section 4 provides maintenance and calibration procedures for equipment and instruments used during the quarter.
- Section 5 provides a summary of the Quality Assurance Performance Audit.

2.0 Background

A summary of background information is presented below, including a description and historic account of land use at the site. The majority of the information presented in this section was taken from a Public Health Assessment (U.S. Public Health Service, 1994).

2.1 Site Description

The HPS site is located in the southeastern portion of San Francisco, California (Figure 1-2). It is bounded by an off-site residential and industrial community, the Hunters Point/Bayview area, on the west. The site occupies a total of 965 acres (500 acres on land and 465 acres in the bay). Originally, the land mass of the HPS was less than 100 acres. The Navy increased the land mass of HPS primarily by using earth from the surrounding hills as fill. Some of the bay fill area and the industrial landfill is composed of sandblast waste and miscellaneous industrial debris. Most of the site is fenced, although some areas are accessible by boat or by foot.

Hunters Point/Bayview is a community composed of residential, commercial, and industrial properties. A natural gas-fueled steam generating power plant is located about a mile north of HPS. The Southeast Sewage Treatment Plant for the City and County of San Francisco is located approximately one mile west of HPS. There is a water bottling company within one-half mile of the site. The Candlestick Point State Recreation Area and 3Com Park and professional sports stadium are located approximately one mile southwest of the site. Other industrial facilities such as concrete recycling take place in the general vicinity.

2.2 Site History

The site has been used for over 100 years as a ship repair facility. The northern and eastern shores of HPS were used for ship repair with drydock and berthing facilities; the southern shore was not used for shipping activities. The waterfront facilities consist of 40 deep-water berths and six dry docks of various sizes. The remaining facilities consist of office, industrial and residential buildings. There is one Navy administrative building on the site, but no Naval shipyard activities are taking place.

Naval operations at HPS began in 1941. The Navy increased ship building operations to accelerate production of liberty ships during World War II. From 1941 to 1974, the principal

facility activity was ship building; Naval ships and submarines were also modified, maintained, and repaired at this facility. In addition to repair activities, the facility was used for housing, naval ordinance, training exercises, and other research efforts.

The site remained an active base until 1974, when it was placed on industrial reserve. The majority of HPS was leased to Triple A Machine Shop, Inc. (Triple A) from 1976 to 1986 during which time the site was used for ship repair. During this period, Triple A subleased some of the buildings on the site to small businesses (artists, light industrial firms and private warehousing companies). After Triple A left, the subleasees remained.

In 1981, the Department of Defense (DoD) developed the Installation Restoration Program (IRP) to investigate hazardous material disposal sites at DoD facilities. Currently, the Navy is conducting investigations and remediation under the IRP.

In 1986, HPS was taken back by the Navy to be developed as an annex to the Naval Station Treasure Island. Extensive soil and groundwater testing took place to characterize the environmental conditions at this time. Based on the results of the testing, HPS was placed on the United States Environmental Protection Agency's (EPA) National Priority List (NPL) in 1989. The initial Federal Facilities Agreement was signed January 22, 1992, between the Navy, EPA, the State of California, Department of Toxic Substances Control, and the Regional Water Quality Control Board.

The Base Realignment and Closure Commission has selected and approved HPS for closure and disposition. This site represents a significant parcel of land available for redevelopment in San Francisco.

3.0 Air Monitoring Program

Air monitoring was performed during excavation and soil-handling operations in order to assess potential migration of air contaminants from work activities. Air sampling and monitoring were performed in accordance with the PAMP (IT, 1998a). The perimeter air monitoring program consisted of stationary integrated air samplers, real-time air monitoring, collection of meteorological data, and assessment of the data against the established guidelines for this project.

Integrated air sampling was conducted for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), pesticides and polychlorinated biphenyls (PCBs), and metals in suspended particulate matter (metals). These samples provided 24-hour integrated sample data that was used to determine potential effects on human health and the environment. Action Levels for target analytes were established in the Specifications (Tetra Tech, 1998). Action Levels are based on a combination of available data from Occupational Safety and Health Act Permissible Exposure Limits, National Institute of Occupational Safety and Health Recommended Exposure Limits, EPA, Reference Doses and Concentrations, National Ambient Air Quality Standards, the Health Effects Assessment Summary Table, and the CLEAN Contractor calculations.

Real-time air monitoring was conducted for concentrations of total particulate and VOCs. These activities provided instantaneous data for evaluation of real-time emissions.

Meteorological monitoring was conducted to collect data including wind speed, horizontal wind direction, ambient temperature, barometric pressure, and precipitation. Meteorological data were used to make sampler flow calculations and to evaluate integrated air monitoring analytical results.

Sample collection and air monitoring were conducted in accordance with the PAMP (IT, 1998a). The PAMP (IT, 1998a) is the governing document and provides guidelines for the performance of perimeter air monitoring during the environmental restoration activities conducted at Parcel B, including but not limited to, excavation and soil-handling operations. The Response Conditions

defined in the PAMP (IT, 1998a), §§ 4.3 and 4.4, are used to determine the frequency intervals of integrated air sampling and real-time air monitoring.

Integrated sampling frequency is based on the concentrations and carcinogenicity of detected contaminants. There are three progressively more stringent Response Conditions defined in the PAMP (IT, 1998a) for integrated sampling as presented in the table below:

Response Condition	Frequency
I	Every third calendar day
II	Every other calendar day
III	Every day

Real-time air monitoring frequency is based on visible dust, particulate readings, and VOC readings. There are three progressively more stringent Response Conditions defined as presented in the following table.

Response Condition	Frequency
I	One 5-minute monitoring period at least every 2 hours
II	One 5-minute monitoring period at least every hour
III	Continuous 5-minute monitoring periods until Response Condition I is achieved

3.1 Integrated Air Sampling Program

Samples were collected at six air sampling stations (Sample Stations A through F) at five perimeter locations (Figure 1-2). Locations were selected to provide data from upwind and downwind of work areas. The collocated station (Station E), at the northeastern corner of Parcel B, was used to collect duplicate integrated samples to confirm the precision of sample collection and analytical methods. Sampling stations are located in areas clear of obstacles (e.g., trees, structures, etc.) at least 2 meters above the ground, on a flat base that allows free flow of weather elements (precipitation and wind), and are secured with a locking chain-linked fence. The high-

volume air sampling instruments are protected from the elements by stainless steel housings with air inlets that permit air flow to sample collection media. Exhaust flow for the polyurethane foam (PUF) samplers is directed away from the inlet to prevent recycling of air.

Throughout the first two months of the fourth quarter, integrated air samples were collected in accordance with Response Condition I as prescribed in the PAMP (IT, 1998a). Beginning on December 18, 1998, metals sampling was escalated to Response Condition III where it remained for the duration of the fourth quarter (see Section 3.1.4.3).

The criteria used to determine the analytical categories (i.e., VOCs, SVOCS, pesticides and PCBs, and metals) required for integrated sampling were reviewed on a daily basis. Stockpiled material and soil-moving activities were also considered in determining which categories were selected for sampling. Per the PAMP (IT, 1998a), the analytical parameters requested were based on the listed target compounds for each excavation area (Table 3-1) and Action Level criteria (Table 3-2). A summary of dates of activities for each excavation, including the air monitoring target analytes for each excavation is also presented in Table 3-1. Tables 3-3 through 3-14 summarize analytical results of operational as well as non-operational days. If any target analyte within a category was present at an excavation, analyses were performed for all target analytes in that category.

Integrated air samples collected this quarter were submitted to K Prime, Inc. (State of California, Environmental Laboratory Accreditation/Certification Process #1532), located in Santa Rosa, California, under Chain-of-Custody protocol. Air samples were analyzed for VOCs, SVOCS, pesticides, PCBs, and metals except for samples collected between November 24 through November 30, 1998. During this period, because there were no known remedial activities conducted associated with VOCs, there were no samples submitted for analyses of VOCs [PAMP (IT, 1998a)].

As a quality control measure, duplicate samples and field blanks were collected at a rate of at least 10 percent of the total number of integrated air samples collected at the site. Duplicates of samples collected at Station D were collected at adjacent Station E and submitted for laboratory analyses. Blanks were carried into the field during sample collection, again at a minimum rate of 10 percent, and submitted for laboratory analyses with the samples collected from the stations.

The following paragraphs summarize the analytical methods and results of analyses of samples collected during this quarter. Tabular summaries of laboratory analytical are presented in Appendices A through D. Copies of the laboratory reports are presented in Appendix E.

3.1.1 Volatile Organic Compounds Results

Samples collected for analyses of VOCs were collected using an Ambient Volatile Organic Compound Sampler and analyzed following the guidelines in the method listed below.

- VOCs: EPA Method TO14 (EPA, 1988d).

The results of laboratory analyses of samples collected on operational days are presented in Table 3-3. The data includes mean concentrations, maximum concentration, standard deviation, 90th percentile, and number of samples. The same data for non-operational days are presented on Table 3-4, and for total operational and non-operational days on Table 3-5. A summary of the laboratory results for VOCs is presented in Appendix A. Copies of laboratory reports are presented in Appendix E.

As defined in the PAMP (IT, 1998a), exceedances of site Action Levels for VOCs are presented on Table 3-15. The table summarizes predominant wind direction, upwind station analytical result, downwind analytical result, site contribution, Action Limit, and Action Limit exceedance. On occasions when Action Levels were exceeded, upwind and downwind stations were compared. If the downwind concentration was greater than the upwind concentration, the difference was compared with the Action Level. Where the difference was greater than the Action Level, corrective action was taken in the field where necessary and an explanation is provided. Results of laboratory analyses for individual analytes are discussed below.

3.1.1.1 Benzene

Average concentrations of benzene on operational days ranged from 1.626 $\mu\text{g}/\text{m}^3$ (micrograms/cubic meter) to 1.956 $\mu\text{g}/\text{m}^3$. Maximum concentrations on operational days ranged from 3.16 $\mu\text{g}/\text{m}^3$ at Station E to 3.55 $\mu\text{g}/\text{m}^3$ at Stations A, B and F. In most cases when the benzene concentration of a downwind sample was greater than that of an upwind sample, the difference between the two was less than the Action Level for

benzene. Summary benzene results for fourth quarter operational days are presented in Table 3-3.

Table 3-15 presents cases where the difference between the upwind and downwind sample exceeded the benzene Action Level of $0.65 \mu\text{g}/\text{m}^3$. Although analytical data reported single station benzene exceedances for several sampling events, only two sampling events indicated benzene exceedances after comparing upwind and downwind concentrations. The first exceedance occurred on Sunday, October 25, 1999. The wind was from the west-southwest, blowing away from the general public. An upwind concentration of $1.63 \mu\text{g}/\text{m}^3$ was reported at Station A while a downwind concentration of $2.36 \mu\text{g}/\text{m}^3$ was reported at Station D. The difference between the two concentrations is $0.73 \mu\text{g}/\text{m}^3$, a concentration which exceeds the action level of $0.65 \mu\text{g}/\text{m}^3$.

There were no construction activities performed on that day; therefore, the exceedance was not due to on-site construction operations. Further data from the next sampling event on October 28 shows that on-site benzene had returned to acceptable levels. This indicates that the exceedance on October 25 was anomalous.

Analytical results of the November 6 sampling event indicate an on-site benzene exceedance. The wind was primarily out of the southwest, away from the general public. Station F reported an upwind concentration of $0.83 \mu\text{g}/\text{m}^3$ while Station D reported a downwind concentration of $1.60 \mu\text{g}/\text{m}^3$. The difference between the two ($0.77 \mu\text{g}/\text{m}^3$) is in exceedance of the benzene Action Level of $0.65 \mu\text{g}/\text{m}^3$. A review of construction operational logs indicate that on November 6, tractor-trailers were loaded throughout the day out of Building 123, directly upwind from Station D. These activities were the only major events occurring in Parcel B on November 6, a fact which suggests that these operations may have caused the high benzene concentrations. On December 7, when the analytical data from the sampling event was received, these operations were no longer occurring.

According to the PAMP criteria for carcinogens, no immediate action was necessary because the average on-site benzene concentrations for the project duration were all below the benzene Action Level, and because the operations which resulted in the high concentrations had ceased by the time the exceedance was reported. Furthermore, analytical data from the next sampling event on November 9 shows that the on-site benzene concentration had

returned to an acceptable level. This indicates that the exceedance of November 6 was anomalous.

3.1.1.2 1,2-Dichloroethane

The site Action Level for 1,2-dichloroethane is $3 \mu\text{g}/\text{m}^3$. Laboratory analyses reported all concentrations of this contaminant in submitted samples were below the detection limit of $0.4 \mu\text{g}/\text{m}^3$. No concentration of 1,2-dichloroethane exceeded the Action Level.

3.1.1.3 1,1-Dichloroethene

The site Action Level for 1,1-dichloroethene is $1.4 \mu\text{g}/\text{m}^3$. Laboratory analyses reported all concentrations of this contaminant in submitted samples were below the detection limit of $0.4 \mu\text{g}/\text{m}^3$. No concentration of 1,1-dichloroethene exceeded the Action Level.

3.1.1.4 Tetrachloroethene

The site Action Level for tetrachloroethene is $35 \mu\text{g}/\text{m}^3$. Laboratory analyses reported concentrations of this contaminant ranging from less than the detection limit of $0.7 \mu\text{g}/\text{m}^3$ to $4.0 \mu\text{g}/\text{m}^3$. No concentration of tetrachloroethene exceeded the Action Level.

3.1.1.5 Xylene

The site Action Level for xylene is $4,350 \mu\text{g}/\text{m}^3$. Laboratory analyses reported concentrations of this contaminant ranging from less than $0.2 \mu\text{g}/\text{m}^3$ to $102.9 \mu\text{g}/\text{m}^3$. No concentration of xylene exceeded the Action Level.

3.1.2 Semi-Volatile Organic Compounds Results

Samples collected for analyses of SVOCs were collected on PUF filters following the guidelines in the method listed below:

- PAHs: EPA Method TO13 (EPA, 1988a).

The results of laboratory analyses of samples collected on operational days are presented on Table 3-6. The information includes mean concentration, maximum concentration, standard deviation, 90th percentile, and number of samples. The same information for non-operational days is presented in Table 3-7, and for total operational and non-operational days in Table 3-8.

A summary of the laboratory results for SVOCs is presented in Appendix B. Copies of laboratory reports are presented in Appendix E.

Exceedances of site Action Levels for SVOCs are presented on Table 3-15. The table summarizes predominant wind direction, upwind station analytical result, downwind analytical result, site contribution, Action Level, and Action Level exceedance. On occasions when Action Levels were exceeded, upwind and downwind stations were compared and the difference was calculated. If the downwind concentration was greater than the upwind concentration, the difference was compared with the Action Level. Where the difference was greater than the Action Level, corrective action was taken in the field where necessary and an explanation is provided. Results of laboratory analyses for individual analytes are discussed below.

3.1.2.1 Benzo(a)anthracene

The site Action Level for benzo(a)anthracene is $0.3 \mu\text{g}/\text{m}^3$. Laboratory analyses reported all concentrations of this contaminant in submitted samples were below the detection limit of $0.002 \mu\text{g}/\text{m}^3$. No concentration of benzo(a)anthracene exceeded the Action Level.

3.1.2.2 Benzo(a)pyrene

The site Action Level for benzo(a)pyrene is $0.04 \mu\text{g}/\text{m}^3$. Laboratory analyses reported all concentrations of this contaminant in submitted samples were below the detection limit of $0.002 \mu\text{g}/\text{m}^3$. No concentration of benzo(a)pyrene exceeded the Action Level.

3.1.2.3 Benzo(b)fluoranthene

The site Action Level for benzo(b)fluoranthene is $0.3 \mu\text{g}/\text{m}^3$. Laboratory analyses reported all concentrations of this contaminant in submitted samples were below the detection limit of $0.002 \mu\text{g}/\text{m}^3$. No concentration of benzo(b)fluoranthene exceeded the Action Level.

3.1.2.4 Benzo(k)fluoranthene

The site Action Level for benzo(k)fluoranthene is $0.8 \mu\text{g}/\text{m}^3$. Laboratory analyses reported concentrations of this contaminant ranged from less than $0.002 \mu\text{g}/\text{m}^3$ to $0.008 \mu\text{g}/\text{m}^3$. No concentration of benzo(k)fluoranthene exceeded the Action Level.

3.1.2.5 Bis(2-ethylhexyl)phthalate

Average concentrations of bis(2-ethylhexyl)phthalate on operational days ranged from 0.002 $\mu\text{g}/\text{m}^3$ at Stations A, B, C and F to 0.007 $\mu\text{g}/\text{m}^3$ at Station D. Maximum concentrations of bis(2-ethylhexyl)phthalate on operational days ranged from 0.002 $\mu\text{g}/\text{m}^3$ at Stations A, B and F to 0.120 $\mu\text{g}/\text{m}^3$ at Station D. Data from the sampling event on November 24 shows a level of bis(2-ethylhexyl)phthalate at Station E (0.032 $\mu\text{g}/\text{m}^3$), which is in exceedance of the bis(2-ethylhexyl)phthalate Action Level of 0.018 $\mu\text{g}/\text{m}^3$. The wind on November 24 was primarily out of the southwest, away from the general public. All upwind stations reported non-detectable levels of bis(2-ethylhexyl)phthalate on November 24, therefore the downwind concentration of 0.032 $\mu\text{g}/\text{m}^3$ at Station E suggests an exceedance resulting from on-site activities. Upon review of construction operational logs it was noted that on November 24, trucks were loaded throughout the day near Station E. These operations occurred directly adjacent and upwind of Station E. Analytical data from November 24 was received on December 14, by which time the operations in question were no longer occurring. According to the PAMP criteria for carcinogens no immediate action was necessary because the average on-site bis(2-ethylhexyl)phthalate concentrations for the project duration were all below the bis(2-ethylhexyl)phthalate Action Level, and because the operations which resulted in the high concentration were no longer occurring by the time the exceedance was reported. Furthermore, analytical data from the next sampling event on November 27 shows non-detectable levels of bis(2-ethylhexyl)phthalate for all stations.

Analytical data from the sampling event on December 12 reported a bis(2-ethylhexyl)phthalate concentration of 0.019 $\mu\text{g}/\text{m}^3$ at Station D, which is in exceedance of the bis(2-ethylhexyl)phthalate Action Level of 0.018 $\mu\text{g}/\text{m}^3$. The wind on December 12 was out of the northwest, away from the general public. All upwind stations reported non-detectable level of bis(2-ethylhexyl)phthalate on December 12, suggesting that the source of contamination was on-site. Upon review of construction operational logs it was noted that December 12 was a Sunday on which no construction operations occurred, therefore the bis(2-ethylhexyl)phthalate exceedance was not caused by on-site construction activities. Furthermore, analytical data from the next sampling event on December 15 shows acceptable levels of bis(2-ethylhexyl)phthalate at all stations, indicating that the exceedance was an anomaly.

3.1.2.6 Chrysene

The site Action Level for chrysene is $0.14 \mu\text{g}/\text{m}^3$. Laboratory analyses reported that all concentrations of this contaminant were below the detection limit of $0.002 \mu\text{g}/\text{m}^3$. No concentration of chrysene exceeded the Action Level.

3.1.2.7 Dibenzo(a,h)anthracene

The site Action Level for dibenzo(a,h)anthracene is $0.04 \mu\text{g}/\text{m}^3$. Laboratory analyses reported all concentrations of this contaminant in submitted samples were below the detection limit of $0.002 \mu\text{g}/\text{m}^3$. No concentration of dibenzo(a,h)anthracene exceeded the Action Level.

3.1.2.8 Indeno(1,2,3-cd)pyrene

The site Action Level for indeno(1,2,3-cd)pyrene is $0.14 \mu\text{g}/\text{m}^3$. Laboratory analyses reported all concentrations of this contaminant were below the detection limit of $0.002 \mu\text{g}/\text{m}^3$. No concentration of indeno(1,2,3-cd)pyrene exceeded the Action Level.

3.1.2.9 N-nitrosodipropylamine

The site Action Level for n-nitrosodipropylamine is $0.04 \mu\text{g}/\text{m}^3$. Laboratory analyses reported all concentrations of this contaminant in submitted samples were below the detection limit of $0.009 \mu\text{g}/\text{m}^3$. No concentration of n-nitrosodipropylamine exceeded the Action Level.

3.1.3 Pesticides and Polychlorinated Biphenyls

Samples collected for analyses of pesticides and PCBs were collected on PUF filters following the guidelines in the methods listed below.

- Pesticides and PCBs: EPA SW-846, Method 8081 (EPA, 1986b).
- Pesticides: Method T0-4 (EPA, 1984c).

The results of laboratory analyses of samples collected on operational days are presented on Table 3-9. The information includes mean concentration, maximum concentration, standard deviation, 90th percentile, and number of samples. The same information for non-operational days is presented in Table 3-10, and for total operational and non-operational days in Table 3-11. A summary of the laboratory results for pesticides and PCBs is presented in Appendix C. Copies

of laboratory reports are presented in Appendix E.

Exceedances of site Action Levels for pesticides and PCBs are presented on Table 3-15. The table summarizes predominant wind direction, upwind station analytical result, downwind analytical result, site contribution, Action Level, and Action Level exceedance. On occasions when Action Levels were exceeded, upwind and downwind stations were compared. If the downwind concentration was greater than the upwind concentration, the difference was compared with the Action Level. Where the difference was greater than the Action Level, corrective action was taken in the field where necessary and an explanation is provided. Results of laboratory analyses for individual analytes are discussed below.

3.1.3.1 Aldrin

The site Action Level for aldrin is $0.014 \mu\text{g}/\text{m}^3$. Laboratory analyses reported all concentrations of this contaminant in submitted samples were below the detection limit of $0.0002 \mu\text{g}/\text{m}^3$. No concentration of aldrin exceeded the Action Level.

3.1.3.2 4,4'-DDD

The site Action Level for 4,4'-DDD is $0.012 \mu\text{g}/\text{m}^3$. Laboratory analyses reported all concentrations of this contaminant in submitted samples were below the detection limit of $0.0002 \mu\text{g}/\text{m}^3$. No concentration of 4,4'-DDD exceeded the Action Level.

3.1.3.3 4,4'-DDE

The site Action Level for 4,4'-DDT is $0.009 \mu\text{g}/\text{m}^3$. Laboratory analyses reported all concentrations of this contaminant in submitted samples were below the detection limit of $0.0002 \mu\text{g}/\text{m}^3$. No concentration of 4,4'-DDT exceeded the Action Level.

3.1.3.4 4,4'-DDT

The site Action Level for 4,4'-DDT is $0.7 \mu\text{g}/\text{m}^3$. Laboratory analyses reported all concentrations of this contaminant in submitted samples were below the detection limit of $0.0002 \mu\text{g}/\text{m}^3$. No concentration of 4,4'-DDT exceeded the Action Level.

3.1.3.5 Aroclor-1242

The site Action Level for Aroclor-1242 is $0.01 \mu\text{g}/\text{m}^3$. Laboratory analyses reported all concentrations of this contaminant in submitted samples were below the detection limit of $0.002 \mu\text{g}/\text{m}^3$. No concentration of Aroclor-1242 exceeded the Action Level.

3.1.3.6 Aroclor-1254

The site Action Level for Aroclor-1254 is $0.01 \mu\text{g}/\text{m}^3$. Laboratory analyses reported all concentrations of this contaminant in submitted samples were below the detection limit of $0.002 \mu\text{g}/\text{m}^3$. No concentration of Aroclor-1254 exceeded the Action Level.

3.1.3.7 Aroclor-1260

The site Action Level for Aroclor-1260 is $0.01 \mu\text{g}/\text{m}^3$. Laboratory analyses reported concentrations of this contaminant in submitted samples ranged from less than $0.002 \mu\text{g}/\text{m}^3$ to $0.01 \mu\text{g}/\text{m}^3$. No concentration of Aroclor-1260 exceeded the Action Level.

3.1.4 Metals Results

Samples collected for analyses of total suspended particulate and metals in suspended particulate were collected on glass or quartz fiber filters and analyzed following the guidelines below.

- Suspended Particulate Matter: Reference Method for the Determination of Suspended Particulate Matter in the Atmosphere (Title 40 of the Code of Federal Regulations (CFR) Chapter 50, Appendix B, 1987).
- Lead: Reference Method for Detection of Lead in Suspended Particulate Matter Collected from Ambient Air (40 CFR 51, Appendix G, 1987).

The results of laboratory analyses of samples collected on operational days are presented on Table 3-12. The information includes mean concentration, maximum concentration, standard deviation, 90th percentile, and number of samples. The same information for non-operational days is presented on Table 3-13, and for total operational and non-operational days on Table 3-14. A summary of the laboratory results for metals is presented in Appendix D. Copies of laboratory analytical reports are presented in Appendix E.

Exceedances of site Action Levels for metals are presented on Table 3-15. The table summarizes predominant wind direction, upwind station analytical result, downwind station analytical result, site contribution, Action Level, and Action Level exceedance. On occasions when Action Levels were exceeded, upwind and downwind stations were compared. If the downwind concentration was greater than the upwind concentration, the difference was compared with the Action Level. Where the difference was greater than the Action Level, corrective action was taken in the field and an explanation is provided. Results of laboratory analyses for individual analytes are discussed below.

3.1.4.1 Aluminum

The site Action Level for aluminum is $150 \mu\text{g}/\text{m}^3$. Laboratory analyses reported all concentrations of this contaminant in submitted samples were below the detection limit of $2.50 \mu\text{g}/\text{m}^3$. No concentration of aluminum exceeded the Action Level.

3.1.4.2 Arsenic

The site Action Level for arsenic is $0.014 \mu\text{g}/\text{m}^3$. Laboratory analyses reported concentrations of this contaminant ranging from less than $0.001 \mu\text{g}/\text{m}^3$ to $0.003 \mu\text{g}/\text{m}^3$. No concentration of arsenic exceeded the Action Level.

3.1.4.3 Manganese

Average concentrations of manganese on operational days ranged from $0.015 \mu\text{g}/\text{m}^3$ at Station B to $0.037 \mu\text{g}/\text{m}^3$ at Station C. Maximum concentrations of manganese on operational days ranged from $0.045 \mu\text{g}/\text{m}^3$ at Station D to $0.123 \mu\text{g}/\text{m}^3$ at Station C. The site Action Level for manganese is $0.05 \mu\text{g}/\text{m}^3$. Table 3-5 presents cases where sample concentrations exceeded the manganese Action Level; however only two sampling events report exceedances when the difference between upwind and downwind concentrations are considered.

Analytical data from November 18 reported a manganese concentration of $0.123 \mu\text{g}/\text{m}^3$ from a sample collected at Station C. The wind was primarily out of the north-northeast, therefore Station C was at a downwind location. A sample collected at Station B (upwind) indicated a manganese concentration of $0.021 \mu\text{g}/\text{m}^3$, suggesting an on-site manganese concentration of $0.102 \mu\text{g}/\text{m}^3$. Laboratory analytical results were received on December 15. The daily report for December 15 lists actions which were taken in order to mitigate any further manganese exceedances at Station C. These actions included: coating the ground surface with soil cement to minimize dust; researching an applicable revegetation process for the area around the station; initiating intensive cleaning efforts on Innes Avenue to remove any loose soil; and placing manganese analytical data on a rush turnaround from the lab in order to closely monitor the trend. Upon review of construction operational logs it was noted that tractor-trailers hauling fill material were passing by Station C throughout the day, and two IR-18 excavations were being backfilled on November 18. Due to the fact that these operations were no longer occurring on December 15, and also since real-time air monitoring data remained at Action Level I, operations were allowed to continue. The TSP sampling, however, was escalated to Response Condition III as dictated by the PAMP, a frequency at which it remained through the remainder of the quarter.

Analytical data from the sampling event on December 21 also reported high concentrations of manganese. The wind was primarily out of the north. Station D reported an upwind manganese concentration of $0.045 \mu\text{g}/\text{m}^3$ while Station F reported a downwind concentration of $0.103 \mu\text{g}/\text{m}^3$, resulting in an on-site manganese concentration of $0.058 \mu\text{g}/\text{m}^3$ which exceeds the manganese Action Level ($0.05 \mu\text{g}/\text{m}^3$). The TSP sampling had been escalated to Response Condition III on December 15; therefore no sampling schedule modification was necessary. The Air Monitoring Daily Report for January 5, 1999 details the actions taken to prevent further manganese exceedances. Although real-time air monitoring was at Response Condition I on January 5, all construction activities which may have contributed to manganese exceedances were ceased until further data indicated that manganese levels were below the Action Level. Actions taken on January 5 included: thoroughly cleaning all roadways to minimize dust; controlling vehicle speed on site; applying soil cement to the surfaces of all backfilled excavations; and increasing real-time sampling to once every hour for two days. No exceedances were reported from real-time sampling. Work was allowed to continue when analytical data for the three sampling events after December 21 reported no manganese exceedances at any station.

3.1.4.4 Antimony

The site Action Level for antimony is $5 \mu\text{g}/\text{m}^3$. Laboratory analyses reported all concentrations of this contaminant in submitted samples were below the detection limit of $0.50 \mu\text{g}/\text{m}^3$. No concentration of antimony exceeded the Action Level.

3.1.4.5 Beryllium

The site Action Level for beryllium is $0.03 \mu\text{g}/\text{m}^3$. Laboratory analyses reported all concentrations of this contaminant in submitted samples were below the detection limit of $0.01 \mu\text{g}/\text{m}^3$. No concentration of beryllium exceeded the Action Level.

3.1.4.6 Copper

The site Action Level for copper is $10 \mu\text{g}/\text{m}^3$. Laboratory analyses reported concentrations of this contaminant ranged from less than $0.010 \mu\text{g}/\text{m}^3$ to $0.528 \mu\text{g}/\text{m}^3$. No concentration of copper exceeded the Action Level.

3.1.4.7 Zinc

The site Action Level for zinc is $1050 \mu\text{g}/\text{m}^3$. Laboratory analyses reported concentrations of this contaminant ranged from $0.001 \mu\text{g}/\text{m}^3$ to $0.182 \mu\text{g}/\text{m}^3$. No concentration of zinc exceeded the Action Level.

3.1.4.8 Lead

The site Action Level for lead is $1.5 \mu\text{g}/\text{m}^3$. Laboratory analyses reported concentrations of this contaminant ranged from less than $0.02 \mu\text{g}/\text{m}^3$ to $0.80 \mu\text{g}/\text{m}^3$. No concentration of lead exceeded the Action Level.

3.1.4.9 Nickel

The site Action Level for nickel is $10 \mu\text{g}/\text{m}^3$. Laboratory analyses reported all concentrations of this contaminant in submitted samples were below the detection limit of $0.13 \mu\text{g}/\text{m}^3$. No concentration of nickel exceeded the Action Level.

3.1.4.10 Mercury

The site Action Level for mercury is $0.3 \mu\text{g}/\text{m}^3$. Laboratory analyses reported all concentrations of this contaminant in submitted samples were below the detection limit of $0.001 \mu\text{g}/\text{m}^3$. No concentration of mercury exceeded the Action Level.

3.1.4.11 Vanadium

The site Action Level for vanadium is $0.5 \mu\text{g}/\text{m}^3$. Laboratory analyses reported concentrations of this contaminant ranged from less than $0.1 \mu\text{g}/\text{m}^3$ to $0.125 \mu\text{g}/\text{m}^3$. No concentration of vanadium exceeded the Action Level.

3.2 Real-Time Air Monitoring Program

Real-time air monitoring was performed for airborne particulate and VOCs in accordance with the PAMP §3.2.3 (IT, 1998a). Frequency of real-time air monitoring was determined by the Response Conditions outlined in Section 3.0 of this document.

Real-time monitoring procedures included determining and recording the predominant wind direction; monitoring in the area downwind from the operational areas; monitoring upwind of the operational area if an exceedance of the Action Level occurs; and recording the following information:

- a. Time
- b. Observed wind direction
- c. Monitoring location(s)
- d. Site activities
- e. Visual observations of dust
- f. Observed odors
- g. Site conditions
- h. Five-minute estimated average concentrations of VOCs and particulate.

A summary of real-time air monitoring particulate data is presented in Appendix F.

3.2.1 Real-Time Particulate Air Monitoring Results

Airborne particulate was monitored using a real-time aerosol monitor (RAM). Per the PAMP §4.4 (IT, 1998a), standard 2-hour interval real-time monitoring as defined for Response Condition I was performed for the majority of the fourth calendar quarter of 1998. A summary of real-time air monitoring particulate data is presented in Appendix F.

The Action Level for particulate is $20 \mu\text{g}/\text{m}^3$ or 10 percent greater than the upwind concentration. There were no exceedances of the Action Level during the fourth calendar quarter of 1998.

3.2.2 Real-Time Volatile Organic Vapor Monitoring Results

Organic vapor was monitored using an RAE Systems Multigas Monitor Model PGM50-SP. Per the PAMP § 4.4 (IT, 1998a), standard 2-hour interval real-time monitoring as defined for Response Condition I began on July 22, 1998. A summary of real-time air monitoring organic vapor data is presented in Appendix F.

The Action Level for organic vapor is 1.0 part per million by volume (ppmv). All recorded values for organic vapor during this quarter were below the Action Level. No exceedances were recorded for the fourth calendar quarter of 1998.

3.3 Meteorological Data

The Meteorological Monitoring Station consists of a 10-meter tower with mounted instruments and a rain gauge. The tower was constructed at the site to obtain continuously-recorded (on a 5-second basis) local climatic data. See Figure 1-1 for the location of the Meteorological Station. Climatic data included wind speed, horizontal wind direction, ambient temperature, barometric pressure and rainfall. These data were used to evaluate ambient air monitoring results, determine upwind and downwind sampling locations, and calculate actual air volume of samples. Meteorological data are presented as numerical data in Appendix G. Figures 5-1 through 5-4 present wind roses.

Numerical data are included for every day that samples were collected. Data are presented on an hourly average basis and include wind speed, wind direction, ambient temperature, relative humidity, and barometric pressure. (See Appendix G.) Wind speed data were imported to a spreadsheet for calculation of hourly averages of wind speed. The predominant wind direction

(i.e., the direction from which the wind was blowing) was established by the predominant compass direction reported on a 24-hour wind rose.

Wind rose plots are presented for the quarter and for each month of the quarter. (See Figures 5-1 through 5-4.) The wind rose plots provide graphic representations of wind direction, ranges of wind speed, and the percentages of the period for each wind direction and range of wind speed. From these representations, an overview of the predominant wind direction for the period, and therefore the upwind and downwind sample stations (in general), can be inferred.

Figure 5-1 shows the quarterly wind rose plot for the fourth calendar quarter of 1998. As shown on the figure, the predominant wind direction during this quarter was from the west-southwest, though a significant amount of wind was from the southwest direction. This suggests that Sample Stations D and duplicate sample station E were generally downwind stations, and that Sampling Stations A, B, C, and F were generally upwind stations. In general, data recorded during this quarter may be viewed using the easterly side of Parcel B as being downwind and the westerly side as being upwind, although the wind direction may have varied on any particular day. Refer to Appendix G for details regarding a particular day.

Figures 5-2 through 5-4 show monthly wind rose plots for October, November, and December respectively. During the month of October, the prevailing wind direction was from the west-southwest with a notable portion of wind coming from the southwest. In November, the predominant wind direction was from the southwest. During December, the wind was predominantly north-northwest, although there was significant wind from both the northwest and the west-southwest direction.

4.0 Maintenance and Operation

All sample collection equipment are visually inspected each day samples are collected. Samplers are cleaned on a scheduled and as-needed basis.

4.1 Real-Time Air Monitoring Equipment

Real-time air monitoring equipment is field calibrated on a daily basis as described below.

4.1.1 Organic Vapor Analyzer

The VOC air monitoring instrument, an RAE Systems Multigas Monitor Model PGM50-SP (RAE), is an organic vapor analyzer (OVA) calibrated using 100 ppmv isobutylene. The calibration of the RAE is performed on a daily basis. The details of the calibration are recorded in the Equipment Maintenance Logbook, including the equipment identification, date and time of calibration, calibration standard, and equipment rating.

4.1.2 Real-Time Aerosol Monitor

The particulate instrument, a Miniram Aerosol Monitor Model PDM-3, is a real-time aerosol monitor (RAM) calibrated using filtered air. The details of the daily calibration are recorded in the Equipment Maintenance Logbook, including the equipment identification, date and time of calibration, calibration standard, and equipment rating.

4.2 Integrated Air Sampling Equipment

Integrated air sampling equipment was monitored for flow rate on a weekly basis during sample periods and calibrated if needed as summarized below. Samples collected for concentrations of VOCs are also checked by the analytical laboratory for pressure.

4.2.1 Volatile Organic Compounds Sampler

The vacuum/pressure and flow rate is monitored and recorded a minimum of three times during each sample collection period. The final pressure is recorded on Chain-of-Custody. The analytical laboratory measures the vacuum pressure upon receipt, compares the pressures and records the percentage difference. This provides an additional check for the site equipment and efficiency of sample collection vessels. Ambient volatile organic compound samplers were

inspected at each sampling event. Cleaning was conducted as needed, typically monthly.

4.2.2 Semi-Volatile Organic Compounds Sampler

The flow rate on the SVOC sample equipment was monitored and recorded three times during sample collection periods. A flow check using a calibrated orifice standard was conducted on a weekly basis. This assures that the samplers were operating within their respective calibration curves. If a sampler had failed a flow check, samples collected between the time of the failure and the previous flow check would have been considered invalid. This did not occur during this quarter.

A multipoint flow check and calibration was also performed after motor brushes were changed. Motor brushes were changed after 500 hours of use. This equates to approximately every two months when the samplers are operated on a 3-day schedule.

4.2.3 Metals and Particulate Sampler

The flow rate was monitored three times during each sample period on the particulate sample equipment. A sample flow check using a calibrated orifice standard was performed on a weekly basis. This assures that the samplers were operating within their respective calibration curves. If a sampler had failed a flow check, samples collected between the time of the failure and the previous flow check would have been considered invalid.

The particulate sample equipment was also calibrated after motor brushes were changed. Motor brushes were changed after 500 hours of use. This equates to approximately every two months when the samplers are operated on a 3-day schedule.

4.2.4 Meteorological Instrumentation

Meteorological instruments were disassembled and lubricated approximately every 6 weeks. This schedule was adopted as standard operating procedure to prevent corrosion from airborne salt and high humidity.

On November 12, 1998, the temperature sensor on the meteorological tower began malfunctioning, apparently due to the buildup of salt on the sensor, caused by a recurring dense fog. A man-lift was ordered and the sensor was cleaned on November 17, 1998. This action

appeared to solve the problem.

On December 1, 1998, the meteorological software was corrupted and therefore inoperable. A backup copy of the software was ordered from the vendor and installed on December 18, 1998. The software installer was stored on-site to correct any further problems which may arise.

On December 8, 1998, the temperature sensor on the meteorological tower began malfunctioning again. Due to the fact that the sensor had malfunctioned during the previous month, it was determined that the sensor should be replaced. A new sensor was ordered and installed on December 18, 1998. The new sensor functioned correctly and appeared to solve the problem.

On December 29, 1998, the temperature sensor began malfunctioning again. Upon close inspection of the temperature sensor and the connections, it was noted that the line connecting the temperature sensor and the data logger was frayed. This line was subsequently repaired on December 31, 1998, and this action appeared to solve the problem.

During these periods when the temperature sensor and meteorological software were not functioning properly, all meteorological data was obtained from the World Wide Web site (<http://www.nws.mbay.net>) maintained by the National Weather Service. These changes in the data source did not significantly affect the objective of the PAMP (IT, 1998a) and are considered negligible. The meteorological station has provided accurate and reliable data as required for monitoring purposes. To maximize the quality of the data base, additional operational and equipment options will continue to be investigated to prevent occasional equipment malfunction.

5.0 Quality Assurance Performance Audit

Perimeter air monitoring performance and system audits are required by the PAMP (IT, 1998a) on a bi-annual basis. IT's Air Quality Services personnel audited air monitoring procedures and equipment performances on August 13 and 14, 1998. Results of the audit summarized in the Quality Assurance Performance Audit, Hunters Point Shipyards, Superfund Remediation Site, Air Monitoring Network (IT, 1998b) and submitted to the Navy. The audit included a review of the calibration, sampling, and data collection procedures, and testing of air sampling and meteorological data collection instruments. Equipment performance and sampling procedures were satisfactory.

6.0 Modifications of Procedures

The purpose of this section is to document any field conditions that dictated changes to sampling and analytical protocols outlined in the PAMP (IT, 1998a). These alterations were implemented to improve or clarify the perimeter air monitoring program as work at the site proceeded.

6.1 Field Implementation to Procedures

The following adjustments to procedures were implemented as practical measures.

6.1.1 Air Monitoring Log Book

References are made in the PAMP (IT, 1998a) to an Air Monitoring Log Book. This information is stored in files rather than a binder, because of the volume of documentation generated.

6.1.2 Meteorological Data Access

Section 5.0 of the PAMP (IT, 1998a) states that in the case of meteorological monitoring station malfunctions, meteorological data will be obtained from the San Francisco Airport. In practice, when necessary, meteorological data was obtained from the World Wide Web (<http://www.nws.mbay.net>) due to the accessibility of the information.

6.1.3 Sample Station Identification

Section 7.1 suggests that samplers be identified numerically (i.e., 01 through 05, with station 4Q being the duplicate station). Since numerical data are often associated with stations, sample stations were assigned alpha identification (i.e., A through F, with station E being the duplicate station) to reduce the potential for confusion.

6.1.4 Chain-of-Custody Protocol

Subsection 7.2.1 references a standard Chain-of-Custody procedure that is typically used for environmental sample collection. For efficiency and standardization, the procedure was implemented as follows:

- Every sample is assigned a unique identification number that is entered on the Chain-of-Custody form.
- Field Data Collection forms are used to record all pertinent information in the field.

- Data from the Field Data Collection forms are entered into spreadsheets, where automatic calculations are performed and an electronic Chain-of-Custody is produced.

7.0 References

IT Corporation, 1998a, "Perimeter Air Monitoring Plan, Parcel B Remedial Action, Hunters Point Naval Shipyard, San Francisco, California", Revision 1, 1998a.

IT Corporation, 1998b, "Quality Assurance Performance Audit, Hunters Point Shipyards, Superfund Remediation Site, Air Monitoring Network", August.

Tetra Tech EM Inc., 1998, "Draft Final Revision 1, Parcel B, Remedial Design Document II, Technical Specifications/Drawings, Remedial Action, Hunters Point Shipyard, San Francisco, California", 1998.

Title 40 Code of Federal Regulations (CFR) 50, 1987, "Reference Method for the Determination of Suspended Particulate Matter in the Atmosphere (High-Volume Method)", Appendix B, July.

Title 40 CFR 51, 1987, "Reference Method for Detection of Lead in Suspended Particulate Matter Collected from Ambient Air", Appendix G, July.

US EPA, 1988a, "Determination of Benzo(a)pyrene[B(a)P] and Other Polynuclear Aromatic Hydrocarbons (PAHs) in Ambient Air Using Gas Chromatographic (GC) and High Performance Liquid Chromatographic (HPLC) Analysis", Method T013.

U.S. EPA, 1996b "Gas Chromatography with Electron Capture Detection," EPA SW-846, Method 8081, Revision 3, Washington D.C., December.

US EPA, 1984c, "Method for the Determination of Organochlorine Pesticides and Polychlorinated Biphenyls in Ambient Air", Method T0-4, Revision 1.0, April.

US EPA, 1988d, "Method for the Determination of Volatile Organic Compounds (VOC) in Ambient Air Using SUMMA[®] Passivated Canister Sampling and Gas Chromatographic Analysis", Revision 1.0, Method T014, June.

U.S. Public Health Service, Agency for Toxic Substances and Disease Registry, Division of Health Assessment and Consultation, Public Health Assessment, Naval Station Treasure Island Hunter Point Annex, San Francisco County, California, September 30, 1994. CERCLIS NO. CA1170090087, http://atsdr1.atsdr.cdc.gov:8080/HAC/PHA/treasure/tre_tre.html

TABLES

Table 3-1
Excavations and Target Compounds
Hunters Point Naval Shipyard
San Francisco, California

Excavation	Date Started	Date Completed	Date Step Out Started	Date Step Out Completed	Soil Contaminant Target Compounds
IR-06					
A-1	NA	NA	11/17/98	NA	Antimony, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, chrysene, indeno(1,2,3-cd)pyrene, benzene, tetrachloroethylene, Aroclor-1260, TPH-diesel
IR-07					
7-1	NA	NA	NA	11/16/98	Arsenic, beryllium, copper, lead, zinc, 4,4'-DDE, 4,4'-DDT, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, benzo(a)anthracene
7-2	NA	NA	NA	10/07/98	Antimony, beryllium, aldrin, benzo(a)anthracene, chrysene, 4,4'-DDD, 4,4'-DDE, 4,4'-DDT
7-3	NA	NA	NA	12/08/98	Beryllium, copper, lead, zinc, Aroclor-1260, benzo(a)pyrene, benzo(a)anthracene, benzo(b)fluoranthene, chrysene, benzo(k)fluoranthene, dibenzo(a,h)anthracene, indeno(1,2,3-cd)pyrene
7-4	NA	NA	NA	12/08/98	Copper, lead, Aroclor-1260, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, bis(2)ethylhexyl, phthalate, indeno(1,2,3-cd)pyrene
7-5	NA	NA	10/08/98	12/14/98	Beryllium, copper, lead, mercury, zinc, benzo(a)anthracene, benzo(a)pyrene, Aroclor-1260, benzo(b)fluoranthene, benzo(k)fluoranthene, indeno(1,2,3-cd)pyrene, chrysene, TPH-diesel
B0136	NA	NA	NA	11/05/98	4,4'-DDD, 4,4'-DDE, 4,4'-DDT, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene
B0536	NA	NA	10/14/98	12/15/98	Beryllium, Aroclor-1260, TPH-gasoline

Table 3-1
Excavations and Target Compounds
Hunters Point Naval Shipyard
San Francisco, California
(Continued)

Excavation	Date Started	Date Completed	Date Step Out Started	Date Step Out Completed	Soil Contaminant Target Compounds
B0628	NA	NA	NA	11/10/98	Beryllium, Aroclor-1260
B0632	NA	NA	NA	11/25/98	Arsenic, beryllium, TPH-diesel
B0636	NA	NA	11/05/98	11/05/98	Arsenic, lead
B0933	NA	NA	11/05/98	11/05/98	Aroclor-1254
B1036	NA	NA	NA	10/14/98	Beryllium, aldrin, 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, benzo(a)pyrene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, debenzo(a,h)anthracene, indeno(1,2,3-cd)pyrene, chrysene, TPH-diesel
B1127	NA	NA	NA	10/21/98	Beryllium, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, chrysene, dibenzo(a,h)anthracene, benzo(k)fluoranthene, TPH-diesel
B1128	NA	NA	NA	11/02/98	N-nitrosodipropylamine, bis(2-ethylhexyl)phthalate, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene
B1132	NA	NA	NA	11/24/98	Copper, TPH-diesel
B1324	NA	NA	NA	NA	Antimony, benzo(a)anthracene, benzo(b)fluoranthene, chrysene, TPH-diesel
B1422	NA	NA	10/07/98	10/28/98	Beryllium, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, indeno(1,2,3-cd)pyrene, chrysene
IR-10					
B2725	12/3/98	12/3/98	12/23/98	12/23/98	Trichloroethene

Table 3-1
Excavations and Target Compounds
Hunters Point Naval Shipyard
San Francisco, California
(Continued)

Excavation	Date Started	Date Completed	Date Step Out Started	Date Step Out Completed	Soil Contaminant Target Compounds
B2925	11/30/98	11/30/98	NA	NA	Arsenic
B3125	12/3/98	12/3/98	NA	NA	Benzo(a)anthracene, benzo(b)fluoranthene, chrysene
B3425	11/30/98	11/30/98	NA	NA	Beryllium, manganese
B3622	11/19/98	11/19/98	12/10/98	12/17/98	Manganese, Aroclor-1260, TPH-diesel
B3625	12/4/98	12/4/98	NA	NA	Beryllium
IR-18					
18-2	NA	NA	NA	10/05/98	Lead, zinc, Aroclor-1254, Aroclor-1260, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, debenzo(a,h)anthracene, indeno(1,2,3-cd)pyrene, bis(2-ethylhexyl)phthalate, TPH-disel, TPH-motor oil
18-4	NA	NA	10/21/98	12/15/98	Aroclor-1254, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, debenzo(a,h)anthracene, indeno(1,2,3-cd)pyrene, Aroclor-1260
B0241	NA	NA	10/21/98	12/15/98	Aroclor-1254, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, debenzo(a,h)anthracene, indeno(1,2,3-cd)pyrene, Aroclor-1260
B0337	11/16/98	11/16/98	12/04/98	12/20/98	Lead, Aroclor-1260
B0638	NA	NA	NA	12/23/98	4,4'-DDD, 4,4'-DDT, benzo(a)pyrene, benzo(b)fluoranthene, indeno(1,2,3-cd)pyrene

Table 3-1
Excavations and Target Compounds
Hunters Point Naval Shipyard
San Francisco, California
(Continued)

Excavation	Date Started	Date Completed	Date Step Out Started	Date Step Out Completed	Soil Contaminant Target Compounds
B1138	NA	NA	10/06/98	11/03/98	Beryllium, TPH-diesel
IR-20					
20-1	11/18/98	11/18/98	12/10/98	12/10/98	Arsenic, copper, manganese
20-2	11/09/98	11/09/98	11/20/98	12/16/98	Mercury, Aroclor-1260
20/3	11/09/98	11/09/98	NA	NA	Lead, Aroclor-1260
B4217	11/11/98	11/11/98	NA	NA	Aluminum, manganese
B4419	12/07/98	12/07/98	NA	NA	Copper, zinc, Aroclor-1260, bis(2-ethylhexyl)phthalate
B4420	11/09/98	11/09/98	12/14/98	12/14/98	Aroclor-1260
IR-23					
23-1	12/15/98	12/15/98	NA	NA	Coper, zinc, TPH-diesel, TPH-motor oil
23-2	11/25/98	11/25/98	12/15/98	12/15/98	Beryllium, manganese
23-3	12/15/98	12/15/98	NA	NA	Copper, Aroclor-1260, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, indeno(1,2,3-cd)pyrene, TPH-diesel, TPH-gasoline
EE-02	11/16/98	12/20/98	12/28/98	12/28/98	
IR-24					

Table 3-1
Excavations and Target Compounds
Hunters Point Naval Shipyard
San Francisco, California
(Continued)

Excavation	Date Started	Date Completed	Date Step Out Started	Date Step Out Completed	Soil Contaminant Target Compounds
24-1	11/11/98	11/11/98	NA	NA	Arsenic, manganese, TPH-diesel
24-2	11/11/98	11/11/98	12/15/98	12/15/98	Aroclor-1260
24-5	11/16/98	11/16/98	NA	NA	Manganese
24-6	11/10/98	11/10/98	12/10/98	12/10/98	Arsenic, barium, beryllium, copper, manganese
24/7	11/10/98	11/10/98	12/04/98	12/04/98	Mercury
24-8	11/10/98	11/10/98	12/04/98	12/04/98	Arsenic, beryllium, copper, manganese
24-9	12/23/98	NA	NA	NA	Manganese, trichloroethene, TPH-gasoline, TPH-diesel
B2414	11/12/98	11/12/98	12/01/98	12/15/98	Aroclor-1260, TPH-diesel
B2614	11/12/98	11/12/98	NA	NA	Benzo(a)anthracene, benzo(a)pyrene, benzo(b)
B2915	11/12/98	11/12/98	11/25/98	12/18/98	Aroclor-1260, TPH-diesel
B2918	11/19/98	11/19/98	12/02/98	12/02/98	Benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, indeno(1,2,3-cd)pyrene
B3114	11/13/98	11/13/98	12/10/98	12/10/98	Benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene
B3514	11/13/98	11/13/98	NA	NA	Cyanide, zinc, TPH-diesel
B3614	11/16/98	11/16/98	NA	NA	Benzo(a)pyrene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, indeno(a,2,3-cd)pyrene

Table 3-1
Excavations and Target Compounds
Hunters Point Naval Shipyard
San Francisco, California
(Continued)

Excavation	Date Started	Date Completed	Date Step Out Started	Date Step Out Completed	Soil Contaminant Target Compounds
B3718	11/19/98	11/19/98	12/10/98	12/10/98	Aluminum, manganese, chrysene, TPH-diesel
B3822	11/19/98	11/19/98	12/03/98	12/03/98	Zinc, Aroclor-1254, Aroclor-1260, TPH-diesel
B3914	11/16/98	11/16/98	12/14/98	12/14/98	Coper, manganese, chrysene
B4017	12/02/98	12/02/98	NA	NA	Bis(2-ethylhexyl)phthalate
B4113	12/07/98	12/07/98	NA	NA	Benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, chrysene
IR-26					
B4315	11/16/98	11/16/98	NA	NA	Benzo(a)anthracene, chrysene, bis(s-ethylhexyl)phthalate, TPH-motor oil
B4417	11/16/98	11/16/98	12/18/98	NA	Copper
B4715	11/16/98	11/18/98	NA	NA	Arsenic, manganese
B4815	11/16/98	11/18/98	12/01/98	NA	Benzo(a)anthracene, benzo(k)fluoranthene
IR-42					
42-1	11/17/98	11/19/98	12/07/98	12/07/98	Manganese, aluminum, arsenic
B3530	12/07/98	12/07/98	NA	NA	Manganese, aluminum
IR-60					

Table 3-1
Excavations and Target Compounds
Hunters Point Naval Shipyard
San Francisco, California
(Continued)

Excavation	Date Started	Date Completed	Date Step Out Started	Date Step Out Completed	Soil Contaminant Target Compounds
60-1	11/17/98	11/22/98	12/15/98	12/15/98	Arsenic, manganese, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene
60-2	09/09/98	09/16/98	10/28/98	12/28/98	Arsenic, cadmium, copper, zinc, TPH-diesel
B1816	08/27/98	08/27/98	NA	NA	Zinc, TPH-diesel
IR-61					
B2225	08/20/98	08/20/98	NA	NA	Aroclor-1260
B2425	08/26/98	09/14/98	NA	NA	Arsenic, TPH-diesel
IR-62					
B2030	08/26/98	10/08/98	NA	NA	TPH-diesel, TPH-gasoline

Table 3-2
Air Quality Target Compounds and Action Level Criteria for Integrated Sampling
D.O. Number 0109
Hunters Point Naval Shipyard
San Francisco, California

Contaminant	Action Level Criteria ($\mu\text{g}/\text{m}^3$)	Averaging Period	Pollutant Type
Metals (Particulates)			
aluminum	150 ^c	24-hour TWA	non-carcinogen
antimony	5 ^a	24-hour TWA	non-carcinogen
arsenic	0.014	project duration	carcinogen (known)
beryllium	0.03	project duration	carcinogen (probable)
copper	10 ^c	24-hour TWA	non-carcinogen
lead	1.5 ^c	quarterly average	non-carcinogen
manganese	0.05 ^b	24-hour TWA	non-carcinogen
mercury	0.3 ^b	24-hour TWA	non-carcinogen
nickel	10 ^c	24-hour TWA	non-carcinogen
vanadium	0.5 ^b	24-hour TWA	non-carcinogen
zinc	1050 ^d	24-hour TWA	non-carcinogen
VOCs			
benzene	0.65 ^j	project duration	carcinogen (known)
1,2-dichloroethane	3	project duration	carcinogen (probable)
1,2-dichloroethene	1.4	project duration	carcinogen (possible)
tetrachloroethene	35 ^d	24-hour TWA	non-carcinogen
xylene	4350 ^c	24-hour TWA	non-carcinogen
OCPs/PCBs			
aldrin	0.014	project duration	carcinogen (probable)
4,4'-DDD	0.012 ^g	project duration	carcinogen (probable)

Table 3-2
Air Quality Target Compounds and Action Level Criteria for Integrated Sampling
D.O. Number 0109
Hunters Point Naval Shipyard
San Francisco, California
(Continued)

Contaminant	Action Level Criteria ($\mu\text{g}/\text{m}^3$)	Averaging Period	Pollutant Type
4,4'-DDE	0.009 ^a	project duration	carcinogen (probable)
4,4'-DDT	0.7	project duration	carcinogen (probable)
PCBs (Aroclor 1260, 1254, 1242)	0.01	project duration	carcinogen (probable)
PAHs (SVOCs)			
benzo(a)anthracene	0.3 ^h	project duration	carcinogen (probable)
benzo(a)pyrene	0.04 ^h	project duration	carcinogen (probable)
benzo(b)fluoranthene	0.3 ^h	project duration	carcinogen (probable)
benzo(k)fluoranthene	0.8 ^h	project duration	carcinogen (probable)
bis(2-ethylhexyl)phthalate	0.018 ^a	project duration	carcinogen
chrysene	0.14	project duration	carcinogen
dibenzo(a,h)anthracene	0.04 ^h	project duration	carcinogen (probable)
ideno(1,2,3-cd)pyrene	0.14 ^h	project duration	carcinogen
n-nitrosodiprpylamine	0.04 ^g	project duration	carcinogen

Notes:

- a) No inhalation RfD, RfC, or carcinogenic slope factor. Also, no OSHA PEL. Based on NIOSH REL/100.
- b) Based on RfC.
- c) No inhalation RfD or RfC. Based on OSHA PEL/100 for criteria.
- d) No inhalation RfD or RfC. Criteria based on oral RfC, assuming 20 m³/day inhalation rate and 100% absorption.
- e) National Ambient Air Quality Standard.
- f) No current RfC or slope factor. Based on slope factor value withdrawn from HEAST tables in Ref. 1.
- g) Calculated by using the oral carcinogenic slope factor and assuming 20 m³/day inhalation rate and 100% absorption.
- h) Calculated from inhalation slope factor listed in EPA 1993, assuming 20 m³/day inhalation rate and 100% absorption.
- i) No inhalation RfD or OSHA PEL. Used OSHA PEL for coke oven emissions divided by a factor of 100.
- j) This is the minimum detection limit for benzene using the specified TO-14 method which is higher than the action level criteria in Specification 01420 of 0.1 $\mu\text{g}/\text{m}^3$.

Table 3-3
Laboratory Analytical Results
Volatile Organic Compounds - Operational Days
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Station	Mean Concentration	Maximum Concentration	Standard Deviation	90th Percentile	Number of Samples
1,1-DICHLOROETHENE	A	0.200	0.200	0.000	0.000	19
1,1-DICHLOROETHENE	B	0.200	0.200	0.000	0.000	19
1,1-DICHLOROETHENE	C	0.200	0.200	0.000	0.000	19
1,1-DICHLOROETHENE	D	0.200	0.200	0.000	0.000	19
1,1-DICHLOROETHENE	E	0.200	0.200	0.000	0.000	12
1,1-DICHLOROETHENE	F	0.200	0.200	0.000	0.000	19
1,1-DICHLOROETHENE	FB	0.200	0.200	0.000	0.000	12
1,2-DICHLOROETHANE	A	0.200	0.200	0.000	0.000	19
1,2-DICHLOROETHANE	B	0.200	0.200	0.000	0.000	19
1,2-DICHLOROETHANE	C	0.245	1.050	0.195	0.074	19
1,2-DICHLOROETHANE	D	0.200	0.200	0.000	0.000	19
1,2-DICHLOROETHANE	E	0.200	0.200	0.000	0.000	12
1,2-DICHLOROETHANE	F	0.200	0.200	0.000	0.000	19
1,2-DICHLOROETHANE	FB	0.200	0.200	0.000	0.000	12

Table 3-3
Laboratory Analytical Results
Volatile Organic Compounds - Operational Days
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Station	Mean Concentration	Maximum Concentration	Standard Deviation	90th Percentile	Number of Samples
BENZENE	A	1.956	3.550	0.857	0.315	20
BENZENE	B	1.827	3.550	0.907	0.333	20
BENZENE	C	1.943	3.510	0.862	0.317	20
BENZENE	D	1.630	3.230	0.737	0.271	20
BENZENE	E	1.626	3.160	0.809	0.369	13
BENZENE	F	1.732	3.550	0.752	0.277	20
BENZENE	FB	0.150	0.150	0.000	0.000	13
TETRACHLOROETHENE	A	0.509	1.900	0.409	0.154	19
TETRACHLOROETHENE	B	0.382	0.950	0.138	0.052	19
TETRACHLOROETHENE	C	0.382	0.950	0.138	0.052	19
TETRACHLOROETHENE	D	0.592	4.000	0.853	0.322	19
TETRACHLOROETHENE	E	0.433	0.950	0.199	0.095	12
TETRACHLOROETHENE	F	0.455	1.220	0.259	0.098	19
TETRACHLOROETHENE	FB	0.350	0.350	0.000	0.000	12

Table 3-3
Laboratory Analytical Results
Volatile Organic Compounds - Operational Days
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Station	Mean Concentration	Maximum Concentration	Standard Deviation	90th Percentile	Number of Samples
XYLENE	A	5.059	11.640	2.896	1.093	19
XYLENE	B	4.486	11.590	2.840	1.072	19
XYLENE	C	10.375	102.900	22.577	8.520	19
XYLENE	D	3.954	10.330	2.691	1.015	19
XYLENE	E	3.690	8.770	2.735	1.299	12
XYLENE	F	4.146	10.290	2.309	0.871	19
XYLENE	FB	0.200	0.200	0.000	0.000	12

Table 3-4
Laboratory Analytical Results
Volatile Organic Compounds - Non-Operational Days
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Station	Mean Concentration	Maximum Concentration	Standard Deviation	90th Percentile	Number of Samples
1,1-DICHLOROETHENE	A	0.200	0.200	0.000	0.000	19
1,1-DICHLOROETHENE	B	0.200	0.200	0.000	0.000	19
1,1-DICHLOROETHENE	C	0.200	0.200	0.000	0.000	19
1,1-DICHLOROETHENE	D	0.200	0.200	0.000	0.000	19
1,1-DICHLOROETHENE	E	0.200	0.200	0.000	0.000	12
1,1-DICHLOROETHENE	F	0.200	0.200	0.000	0.000	19
1,1-DICHLOROETHENE	FB	0.200	0.200	0.000	0.000	12
1,2-DICHLOROETHANE	A	0.200	0.200	0.000	0.000	19
1,2-DICHLOROETHANE	B	0.200	0.200	0.000	0.000	19
1,2-DICHLOROETHANE	C	0.245	1.050	0.195	0.074	19
1,2-DICHLOROETHANE	D	0.200	0.200	0.000	0.000	19
1,2-DICHLOROETHANE	E	0.200	0.200	0.000	0.000	12
1,2-DICHLOROETHANE	F	0.200	0.200	0.000	0.000	19
1,2-DICHLOROETHANE	FB	0.200	0.200	0.000	0.000	12

Table 3-4
Laboratory Analytical Results
Volatile Organic Compounds - Non-Operational Days
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Station	Mean Concentration	Maximum Concentration	Standard Deviation	90th Percentile	Number of Samples
BENZENE	A	1.956	3.550	0.857	0.315	20
BENZENE	B	1.827	3.550	0.907	0.333	20
BENZENE	C	1.943	3.510	0.862	0.317	20
BENZENE	D	1.630	3.230	0.737	0.271	20
BENZENE	E	1.626	3.160	0.809	0.369	13
BENZENE	F	1.732	3.550	0.752	0.277	20
BENZENE	FB	0.150	0.150	0.000	0.000	13
TETRACHLOROETHENE	A	0.509	1.900	0.409	0.154	19
TETRACHLOROETHENE	B	0.382	0.950	0.138	0.052	19
TETRACHLOROETHENE	C	0.382	0.950	0.138	0.052	19
TETRACHLOROETHENE	D	0.592	4.000	0.853	0.322	19
TETRACHLOROETHENE	E	0.433	0.950	0.199	0.095	12
TETRACHLOROETHENE	F	0.455	1.220	0.259	0.098	19
TETRACHLOROETHENE	FB	0.350	0.350	0.000	0.000	12

Table 3-4
Laboratory Analytical Results
Volatile Organic Compounds - Non-Operational Days
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Station	Mean Concentration	Maximum Concentration	Standard Deviation	90th Percentile	Number of Samples
XYLENE	A	5.059	11.640	2.896	1.093	19
XYLENE	B	4.486	11.590	2.840	1.072	19
XYLENE	C	10.375	102.900	22.577	8.520	19
XYLENE	D	3.954	10.330	2.691	1.015	19
XYLENE	E	3.690	8.770	2.735	1.299	12
XYLENE	F	4.146	10.290	2.309	0.871	19
XYLENE	FB	0.200	0.200	0.000	0.000	12

Table 3-5
Laboratory Analytical Results
Volatile Organic Compounds - Total
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Station	Mean Concentration	Maximum Concentration	Standard Deviation	90th Percentile	Number of Samples
1,1-DICHLOROETHENE	A	0.200	0.200	0.000	0.000	27
1,1-DICHLOROETHENE	B	0.200	0.200	0.000	0.000	27
1,1-DICHLOROETHENE	C	0.200	0.200	0.000	0.000	26
1,1-DICHLOROETHENE	D	0.200	0.200	0.000	0.000	27
1,1-DICHLOROETHENE	E	0.200	0.200	0.000	0.000	16
1,1-DICHLOROETHENE	F	0.200	0.200	0.000	0.000	27
1,1-DICHLOROETHENE	FB	0.200	0.200	0.000	0.000	17
1,2-DICHLOROETHANE	A	0.200	0.200	0.000	0.000	27
1,2-DICHLOROETHANE	B	0.200	0.200	0.000	0.000	27
1,2-DICHLOROETHANE	C	0.233	1.050	0.167	0.054	26
1,2-DICHLOROETHANE	D	0.200	0.200	0.000	0.000	27
1,2-DICHLOROETHANE	E	0.200	0.200	0.000	0.000	16
1,2-DICHLOROETHANE	F	0.200	0.200	0.000	0.000	27
1,2-DICHLOROETHANE	FB	0.200	0.200	0.000	0.000	17

Table 3-5
Laboratory Analytical Results
Volatile Organic Compounds - Total
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Station	Mean Concentration	Maximum Concentration	Standard Deviation	90th Percentile	Number of Samples
BENZENE	A	2.082	3.550	0.840	0.257	29
BENZENE	B	2.037	3.550	0.904	0.276	29
BENZENE	C	2.185	5.270	1.044	0.324	28
BENZENE	D	1.872	3.260	0.824	0.252	29
BENZENE	E	1.721	3.190	0.823	0.328	17
BENZENE	F	1.928	3.550	0.777	0.237	29
BENZENE	FB	0.150	0.150	0.000	0.000	19
TETRACHLOROETHENE	A	0.458	1.900	0.343	0.107	28
TETRACHLOROETHENE	B	0.407	1.360	0.218	0.068	28
TETRACHLOROETHENE	C	0.372	0.950	0.115	0.037	27
TETRACHLOROETHENE	D	0.514	4.000	0.706	0.219	28
TETRACHLOROETHENE	E	0.412	0.950	0.175	0.072	16
TETRACHLOROETHENE	F	0.651	6.780	1.221	0.379	28
TETRACHLOROETHENE	FB	0.350	0.350	0.000	0.000	18

Table 3-5
Laboratory Analytical Results
Volatile Organic Compounds - Total
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Station	Mean Concentration	Maximum Concentration	Standard Deviation	90th Percentile	Number of Samples
XYLENE	A	5.457	11.640	2.785	0.866	28
XYLENE	B	4.899	11.590	2.580	0.802	28
XYLENE	C	9.154	102.900	18.919	5.989	27
XYLENE	D	4.297	10.330	2.448	0.761	28
XYLENE	E	3.769	8.770	2.491	1.024	16
XYLENE	F	4.412	10.290	2.141	0.665	28
XYLENE	FB	0.200	0.200	0.000	0.000	18

Table 3-6
Laboratory Analytical Results
Semi-Volatile Organic Compounds - Operational Days
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Station	Mean Concentration	Maximum Concentration	Standard Deviation	90th Percentile	Number of Samples
BENZO(A)ANTHRACENE	A	0.001	0.001	0.000	0.000	21
BENZO(A)ANTHRACENE	B	0.001	0.001	0.000	0.000	21
BENZO(A)ANTHRACENE	C	0.001	0.001	0.000	0.000	21
BENZO(A)ANTHRACENE	D	0.001	0.001	0.000	0.000	21
BENZO(A)ANTHRACENE	E	0.001	0.001	0.000	0.000	13
BENZO(A)ANTHRACENE	F	0.001	0.001	0.000	0.000	21
BENZO(A)ANTHRACENE	FB	0.001	0.001	0.000	0.000	12
BENZO(A)PYRENE	A	0.001	0.001	0.000	0.000	21
BENZO(A)PYRENE	B	0.001	0.001	0.000	0.000	21
BENZO(A)PYRENE	C	0.001	0.001	0.000	0.000	21
BENZO(A)PYRENE	D	0.001	0.001	0.000	0.000	21
BENZO(A)PYRENE	E	0.001	0.001	0.000	0.000	13
BENZO(A)PYRENE	F	0.001	0.001	0.000	0.000	21
BENZO(A)PYRENE	FB	0.001	0.001	0.000	0.000	12

Table 3-6
Laboratory Analytical Results
Semi-Volatile Organic Compounds - Operational Days
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Station	Mean Concentration	Maximum Concentration	Standard Deviation	90th Percentile	Number of Samples
BENZO(B)FLUORANTHENE	A	0.001	0.001	0.000	0.000	21
BENZO(B)FLUORANTHENE	B	0.001	0.001	0.000	0.000	21
BENZO(B)FLUORANTHENE	C	0.001	0.001	0.000	0.000	21
BENZO(B)FLUORANTHENE	D	0.001	0.001	0.000	0.000	21
BENZO(B)FLUORANTHENE	E	0.001	0.001	0.000	0.000	13
BENZO(B)FLUORANTHENE	F	0.001	0.001	0.000	0.000	21
BENZO(B)FLUORANTHENE	FB	0.001	0.001	0.000	0.000	12
BENZO(K)FLUORANTHENE	A	0.001	0.001	0.000	0.000	21
BENZO(K)FLUORANTHENE	B	0.001	0.001	0.000	0.000	21
BENZO(K)FLUORANTHENE	C	0.001	0.001	0.000	0.000	21
BENZO(K)FLUORANTHENE	D	0.001	0.001	0.000	0.000	21
BENZO(K)FLUORANTHENE	E	0.001	0.001	0.000	0.000	13
BENZO(K)FLUORANTHENE	F	0.001	0.001	0.000	0.000	21
BENZO(K)FLUORANTHENE	FB	0.001	0.001	0.000	0.000	12

Table 3-6
Laboratory Analytical Results
Semi-Volatile Organic Compounds - Operational Days
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Station	Mean Concentration	Maximum Concentration	Standard Deviation	90th Percentile	Number of Samples
BIS(2-ETHYLHEXYL)PHTHALATE	A	0.002	0.002	0.000	0.000	21
BIS(2-ETHYLHEXYL)PHTHALATE	B	0.002	0.002	0.000	0.000	21
BIS(2-ETHYLHEXYL)PHTHALATE	C	0.002	0.010	0.002	0.001	21
BIS(2-ETHYLHEXYL)PHTHALATE	D	0.007	0.120	0.026	0.009	21
BIS(2-ETHYLHEXYL)PHTHALATE	E	0.005	0.030	0.008	0.004	13
BIS(2-ETHYLHEXYL)PHTHALATE	F	0.002	0.002	0.001	0.000	21
BIS(2-ETHYLHEXYL)PHTHALATE	FB	0.009	0.090	0.025	0.012	12
CHRYSENE	A	0.001	0.001	0.000	0.000	21
CHRYSENE	B	0.001	0.001	0.000	0.000	21
CHRYSENE	C	0.001	0.001	0.000	0.000	21
CHRYSENE	D	0.001	0.001	0.000	0.000	21
CHRYSENE	E	0.001	0.001	0.000	0.000	13
CHRYSENE	F	0.001	0.001	0.000	0.000	21
CHRYSENE	FB	0.001	0.001	0.000	0.000	12

Table 3-6
Laboratory Analytical Results
Semi-Volatile Organic Compounds - Operational Days
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Station	Mean Concentration	Maximum Concentration	Standard Deviation	90th Percentile	Number of Samples
DIBENZO(A,H)ANTHRACENE	A	0.001	0.001	0.000	0.000	21
DIBENZO(A,H)ANTHRACENE	B	0.001	0.001	0.000	0.000	21
DIBENZO(A,H)ANTHRACENE	C	0.001	0.001	0.000	0.000	21
DIBENZO(A,H)ANTHRACENE	D	0.001	0.001	0.000	0.000	21
DIBENZO(A,H)ANTHRACENE	E	0.001	0.001	0.000	0.000	13
DIBENZO(A,H)ANTHRACENE	F	0.001	0.001	0.000	0.000	21
DIBENZO(A,H)ANTHRACENE	FB	0.001	0.001	0.000	0.000	12
INDENO(1,2,3-CD)PYRENE	A	0.001	0.001	0.000	0.000	21
INDENO(1,2,3-CD)PYRENE	B	0.001	0.001	0.000	0.000	21
INDENO(1,2,3-CD)PYRENE	C	0.001	0.001	0.000	0.000	21
INDENO(1,2,3-CD)PYRENE	D	0.001	0.001	0.000	0.000	21
INDENO(1,2,3-CD)PYRENE	E	0.001	0.001	0.000	0.000	13
INDENO(1,2,3-CD)PYRENE	F	0.001	0.001	0.000	0.000	21
INDENO(1,2,3-CD)PYRENE	FB	0.001	0.001	0.000	0.000	12

Table 3-6
Laboratory Analytical Results
Semi-Volatile Organic Compounds - Operational Days
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Station	Mean Concentration	Maximum Concentration	Standard Deviation	90th Percentile	Number of Samples
N-NITROSODIPROPYLAMINE	A	0.005	0.006	0.001	0.000	21
N-NITROSODIPROPYLAMINE	B	0.005	0.006	0.001	0.000	21
N-NITROSODIPROPYLAMINE	C	0.005	0.006	0.001	0.000	21
N-NITROSODIPROPYLAMINE	D	0.005	0.006	0.001	0.000	21
N-NITROSODIPROPYLAMINE	E	0.005	0.006	0.000	0.000	13
N-NITROSODIPROPYLAMINE	F	0.005	0.006	0.001	0.000	21
N-NITROSODIPROPYLAMINE	FB	0.005	0.006	0.001	0.000	12

Table 3-7
Laboratory Analytical Results
Semi-Volatile Organic Compounds - Non-Operational Days
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Station	Mean Concentration	Maximum Concentration	Standard Deviation	90th Percentile	Number of Samples
BENZO(A)ANTHRACENE	A	0.001	0.001	0.000	0.000	9
BENZO(A)ANTHRACENE	B	0.001	0.001	0.000	0.000	9
BENZO(A)ANTHRACENE	C	0.001	0.001	0.000	0.000	9
BENZO(A)ANTHRACENE	D	0.001	0.001	0.000	0.000	9
BENZO(A)ANTHRACENE	E	0.001	0.001	0.000	0.000	5
BENZO(A)ANTHRACENE	F	0.001	0.001	0.000	0.000	9
BENZO(A)ANTHRACENE	FB	0.001	0.001	0.000	0.000	7
BENZO(A)PYRENE	A	0.001	0.001	0.000	0.000	9
BENZO(A)PYRENE	B	0.001	0.001	0.000	0.000	9
BENZO(A)PYRENE	C	0.001	0.001	0.000	0.000	9
BENZO(A)PYRENE	D	0.001	0.001	0.000	0.000	9
BENZO(A)PYRENE	E	0.001	0.001	0.000	0.000	5
BENZO(A)PYRENE	F	0.001	0.001	0.000	0.000	9
BENZO(A)PYRENE	FB	0.001	0.001	0.000	0.000	7

Table 3-7
Laboratory Analytical Results
Semi-Volatile Organic Compounds - Non-Operational Days
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Station	Mean Concentration	Maximum Concentration	Standard Deviation	90th Percentile	Number of Samples
BENZO(B)FLUORANTHENE	A	0.001	0.001	0.000	0.000	9
BENZO(B)FLUORANTHENE	B	0.001	0.001	0.000	0.000	9
BENZO(B)FLUORANTHENE	C	0.001	0.001	0.000	0.000	9
BENZO(B)FLUORANTHENE	D	0.001	0.001	0.000	0.000	9
BENZO(B)FLUORANTHENE	E	0.001	0.001	0.000	0.000	5
BENZO(B)FLUORANTHENE	F	0.001	0.001	0.000	0.000	9
BENZO(B)FLUORANTHENE	FB	0.001	0.001	0.000	0.000	7
BENZO(K)FLUORANTHENE	A	0.001	0.001	0.000	0.000	9
BENZO(K)FLUORANTHENE	B	0.001	0.001	0.000	0.000	9
BENZO(K)FLUORANTHENE	C	0.001	0.001	0.000	0.000	9
BENZO(K)FLUORANTHENE	D	0.001	0.001	0.000	0.000	9
BENZO(K)FLUORANTHENE	E	0.001	0.001	0.000	0.000	5
BENZO(K)FLUORANTHENE	F	0.001	0.001	0.000	0.000	9
BENZO(K)FLUORANTHENE	FB	0.001	0.001	0.000	0.000	7

Table 3-7
Laboratory Analytical Results
Semi-Volatile Organic Compounds - Non-Operational Days
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Station	Mean Concentration	Maximum Concentration	Standard Deviation	90th Percentile	Number of Samples
BIS(2-ETHYLHEXYL)PHthalate	A	0.003	0.010	0.003	0.001	9
BIS(2-ETHYLHEXYL)PHthalate	B	0.003	0.010	0.003	0.001	9
BIS(2-ETHYLHEXYL)PHthalate	C	0.004	0.010	0.004	0.002	9
BIS(2-ETHYLHEXYL)PHthalate	D	0.005	0.020	0.006	0.003	9
BIS(2-ETHYLHEXYL)PHthalate	E	0.002	0.003	0.000	0.000	5
BIS(2-ETHYLHEXYL)PHthalate	F	0.003	0.010	0.003	0.001	9
BIS(2-ETHYLHEXYL)PHthalate	FB	0.002	0.002	0.000	0.000	7
CHRYSENE	A	0.001	0.001	0.000	0.000	9
CHRYSENE	B	0.001	0.001	0.000	0.000	9
CHRYSENE	C	0.001	0.001	0.000	0.000	9
CHRYSENE	D	0.001	0.001	0.000	0.000	9
CHRYSENE	E	0.001	0.001	0.000	0.000	5
CHRYSENE	F	0.001	0.001	0.000	0.000	9
CHRYSENE	FB	0.001	0.001	0.000	0.000	7

Table 3-7
Laboratory Analytical Results
Semi-Volatile Organic Compounds - Non-Operational Days
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Station	Mean Concentration	Maximum Concentration	Standard Deviation	90th Percentile	Number of Samples
DIBENZO(A,H)ANTHRACENE	A	0.001	0.001	0.000	0.000	9
DIBENZO(A,H)ANTHRACENE	B	0.001	0.001	0.000	0.000	9
DIBENZO(A,H)ANTHRACENE	C	0.001	0.001	0.000	0.000	9
DIBENZO(A,H)ANTHRACENE	D	0.001	0.001	0.000	0.000	9
DIBENZO(A,H)ANTHRACENE	E	0.001	0.001	0.000	0.000	5
DIBENZO(A,H)ANTHRACENE	F	0.001	0.001	0.000	0.000	9
DIBENZO(A,H)ANTHRACENE	FB	0.001	0.001	0.000	0.000	7
INDENO(1,2,3-CD)PYRENE	A	0.001	0.001	0.000	0.000	9
INDENO(1,2,3-CD)PYRENE	B	0.001	0.001	0.000	0.000	9
INDENO(1,2,3-CD)PYRENE	C	0.001	0.001	0.000	0.000	9
INDENO(1,2,3-CD)PYRENE	D	0.001	0.001	0.000	0.000	9
INDENO(1,2,3-CD)PYRENE	E	0.001	0.001	0.000	0.000	5
INDENO(1,2,3-CD)PYRENE	F	0.001	0.001	0.000	0.000	9
INDENO(1,2,3-CD)PYRENE	FB	0.001	0.001	0.000	0.000	7

Table 3-7
Laboratory Analytical Results
Semi-Volatile Organic Compounds - Non-Operational Days
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Station	Mean Concentration	Maximum Concentration	Standard Deviation	90th Percentile	Number of Samples
N-NITROSODIPROPYLAMINE	A	0.005	0.006	0.001	0.000	9
N-NITROSODIPROPYLAMINE	B	0.005	0.006	0.001	0.000	9
N-NITROSODIPROPYLAMINE	C	0.005	0.006	0.001	0.000	9
N-NITROSODIPROPYLAMINE	D	0.005	0.006	0.001	0.000	9
N-NITROSODIPROPYLAMINE	E	0.005	0.006	0.001	0.001	5
N-NITROSODIPROPYLAMINE	F	0.005	0.006	0.001	0.000	9
N-NITROSODIPROPYLAMINE	FB	0.005	0.005	0.000	0.000	7

Table 3-8
Laboratory Analytical Results
Semi-Volatile Organic Compounds - Total
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Station	Mean Concentration	Maximum Concentration	Standard Deviation	90th Percentile	Number of Samples
BENZO(A)ANTHRACENE	A	0.001	0.001	0.000	0.000	30
BENZO(A)ANTHRACENE	B	0.001	0.001	0.000	0.000	30
BENZO(A)ANTHRACENE	C	0.001	0.001	0.000	0.000	30
BENZO(A)ANTHRACENE	D	0.001	0.001	0.000	0.000	30
BENZO(A)ANTHRACENE	E	0.001	0.001	0.000	0.000	18
BENZO(A)ANTHRACENE	F	0.001	0.001	0.000	0.000	30
BENZO(A)ANTHRACENE	FB	0.001	0.001	0.000	0.000	19
BENZO(A)PYRENE	A	0.001	0.001	0.000	0.000	30
BENZO(A)PYRENE	B	0.001	0.001	0.000	0.000	30
BENZO(A)PYRENE	C	0.001	0.001	0.000	0.000	30
BENZO(A)PYRENE	D	0.001	0.001	0.000	0.000	30
BENZO(A)PYRENE	E	0.001	0.001	0.000	0.000	18
BENZO(A)PYRENE	F	0.001	0.001	0.000	0.000	30
BENZO(A)PYRENE	FB	0.001	0.001	0.000	0.000	19

Table 3-8
Laboratory Analytical Results
Semi-Volatile Organic Compounds - Total
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Station	Mean Concentration	Maximum Concentration	Standard Deviation	90th Percentile	Number of Samples
BENZO(B)FLUORANTHENE	A	0.001	0.001	0.000	0.000	30
BENZO(B)FLUORANTHENE	B	0.001	0.001	0.000	0.000	30
BENZO(B)FLUORANTHENE	C	0.001	0.001	0.000	0.000	30
BENZO(B)FLUORANTHENE	D	0.001	0.001	0.000	0.000	30
BENZO(B)FLUORANTHENE	E	0.001	0.001	0.000	0.000	18
BENZO(B)FLUORANTHENE	F	0.001	0.001	0.000	0.000	30
BENZO(B)FLUORANTHENE	FB	0.001	0.001	0.000	0.000	19
BENZO(K)FLUORANTHENE	A	0.001	0.001	0.000	0.000	30
BENZO(K)FLUORANTHENE	B	0.001	0.001	0.000	0.000	30
BENZO(K)FLUORANTHENE	C	0.001	0.001	0.000	0.000	30
BENZO(K)FLUORANTHENE	D	0.001	0.001	0.000	0.000	30
BENZO(K)FLUORANTHENE	E	0.001	0.001	0.000	0.000	18
BENZO(K)FLUORANTHENE	F	0.001	0.001	0.000	0.000	30
BENZO(K)FLUORANTHENE	FB	0.001	0.001	0.000	0.000	19

Table 3-8
Laboratory Analytical Results
Semi-Volatile Organic Compounds - Total
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Station	Mean Concentration	Maximum Concentration	Standard Deviation	90th Percentile	Number of Samples
BIS(2-ETHYLHEXYL)PHthalate	A	0.002	0.010	0.001	0.000	30
BIS(2-ETHYLHEXYL)PHthalate	B	0.002	0.010	0.001	0.000	30
BIS(2-ETHYLHEXYL)PHthalate	C	0.003	0.010	0.002	0.001	30
BIS(2-ETHYLHEXYL)PHthalate	D	0.007	0.120	0.022	0.007	30
BIS(2-ETHYLHEXYL)PHthalate	E	0.004	0.030	0.007	0.003	18
BIS(2-ETHYLHEXYL)PHthalate	F	0.002	0.010	0.002	0.000	30
BIS(2-ETHYLHEXYL)PHthalate	FB	0.007	0.090	0.020	0.008	19
CHRYSENE	A	0.001	0.001	0.000	0.000	30
CHRYSENE	B	0.001	0.001	0.000	0.000	30
CHRYSENE	C	0.001	0.001	0.000	0.000	30
CHRYSENE	D	0.001	0.001	0.000	0.000	30
CHRYSENE	E	0.001	0.001	0.000	0.000	18
CHRYSENE	F	0.001	0.001	0.000	0.000	30
CHRYSENE	FB	0.001	0.001	0.000	0.000	19

Table 3-8
Laboratory Analytical Results
Semi-Volatile Organic Compounds - Total
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Station	Mean Concentration	Maximum Concentration	Standard Deviation	90th Percentile	Number of Samples
DIBENZO(A,H)ANTHRACENE	A	0.001	0.001	0.000	0.000	30
DIBENZO(A,H)ANTHRACENE	B	0.001	0.001	0.000	0.000	30
DIBENZO(A,H)ANTHRACENE	C	0.001	0.001	0.000	0.000	30
DIBENZO(A,H)ANTHRACENE	D	0.001	0.001	0.000	0.000	30
DIBENZO(A,H)ANTHRACENE	E	0.001	0.001	0.000	0.000	18
DIBENZO(A,H)ANTHRACENE	F	0.001	0.001	0.000	0.000	30
DIBENZO(A,H)ANTHRACENE	FB	0.001	0.001	0.000	0.000	19
INDENO(1,2,3-CD)PYRENE	A	0.001	0.001	0.000	0.000	30
INDENO(1,2,3-CD)PYRENE	B	0.001	0.001	0.000	0.000	30
INDENO(1,2,3-CD)PYRENE	C	0.001	0.001	0.000	0.000	30
INDENO(1,2,3-CD)PYRENE	D	0.001	0.001	0.000	0.000	30
INDENO(1,2,3-CD)PYRENE	E	0.001	0.001	0.000	0.000	18
INDENO(1,2,3-CD)PYRENE	F	0.001	0.001	0.000	0.000	30
INDENO(1,2,3-CD)PYRENE	FB	0.001	0.001	0.000	0.000	19

Table 3-8
Laboratory Analytical Results
Semi-Volatile Organic Compounds - Total
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Station	Mean Concentration	Maximum Concentration	Standard Deviation	90th Percentile	Number of Samples
N-NITROSODIPROPYLAMINE	A	0.005	0.006	0.001	0.000	30
N-NITROSODIPROPYLAMINE	B	0.005	0.006	0.001	0.000	30
N-NITROSODIPROPYLAMINE	C	0.005	0.006	0.001	0.000	30
N-NITROSODIPROPYLAMINE	D	0.005	0.006	0.001	0.000	30
N-NITROSODIPROPYLAMINE	E	0.005	0.006	0.001	0.000	18
N-NITROSODIPROPYLAMINE	F	0.005	0.006	0.001	0.000	30
N-NITROSODIPROPYLAMINE	FB	0.005	0.006	0.001	0.000	19

Table 3-9
Laboratory Analytical Results
Pesticides / Polychlorinated Biphenyls - Operational Days
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Station	Mean Concentration	Maximum Concentration	Standard Deviation	90th Percentile	Number of Samples
4,4'-DDD	A	0.000	0.000	0.000	0.000	21
4,4'-DDD	B	0.000	0.000	0.000	0.000	21
4,4'-DDD	C	0.000	0.000	0.000	0.000	21
4,4'-DDD	D	0.000	0.000	0.000	0.000	21
4,4'-DDD	E	0.000	0.000	0.000	0.000	13
4,4'-DDD	F	0.000	0.000	0.000	0.000	21
4,4'-DDD	FB	0.000	0.000	0.000	0.000	12
4,4'-DDE	A	0.000	0.000	0.000	0.000	21
4,4'-DDE	B	0.000	0.000	0.000	0.000	21
4,4'-DDE	C	0.000	0.000	0.000	0.000	21
4,4'-DDE	D	0.000	0.000	0.000	0.000	21
4,4'-DDE	E	0.000	0.000	0.000	0.000	13
4,4'-DDE	F	0.000	0.000	0.000	0.000	21
4,4'-DDE	FB	0.000	0.000	0.000	0.000	12

Table 3-9
Laboratory Analytical Results
Pesticides / Polychlorinated Biphenyls - Operational Days
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Station	Mean Concentration	Maximum Concentration	Standard Deviation	90th Percentile	Number of Samples
4,4'-DDT	A	0.000	0.000	0.000	0.000	21
4,4'-DDT	B	0.000	0.000	0.000	0.000	21
4,4'-DDT	C	0.000	0.000	0.000	0.000	21
4,4'-DDT	D	0.000	0.000	0.000	0.000	21
4,4'-DDT	E	0.000	0.000	0.000	0.000	13
4,4'-DDT	F	0.000	0.000	0.000	0.000	21
4,4'-DDT	FB	0.000	0.000	0.000	0.000	12
ALDRIN	A	0.000	0.000	0.000	0.000	21
ALDRIN	B	0.000	0.000	0.000	0.000	21
ALDRIN	C	0.000	0.000	0.000	0.000	21
ALDRIN	D	0.000	0.000	0.000	0.000	21
ALDRIN	E	0.000	0.000	0.000	0.000	13
ALDRIN	F	0.000	0.000	0.000	0.000	21
ALDRIN	FB	0.000	0.000	0.000	0.000	12

Table 3-9
Laboratory Analytical Results
Pesticides / Polychlorinated Biphenyls - Operational Days
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Station	Mean Concentration	Maximum Concentration	Standard Deviation	90th Percentile	Number of Samples
AROCLOR 1242	A	0.001	0.001	0.000	0.000	21
AROCLOR 1242	B	0.001	0.001	0.000	0.000	21
AROCLOR 1242	C	0.001	0.001	0.000	0.000	21
AROCLOR 1242	D	0.001	0.001	0.000	0.000	21
AROCLOR 1242	E	0.001	0.001	0.000	0.000	13
AROCLOR 1242	F	0.001	0.001	0.000	0.000	21
AROCLOR 1242	FB	0.001	0.001	0.000	0.000	12
AROCLOR 1254	A	0.001	0.001	0.000	0.000	21
AROCLOR 1254	B	0.001	0.001	0.000	0.000	21
AROCLOR 1254	C	0.001	0.001	0.000	0.000	21
AROCLOR 1254	D	0.001	0.001	0.000	0.000	21
AROCLOR 1254	E	0.001	0.001	0.000	0.000	13
AROCLOR 1254	F	0.001	0.001	0.000	0.000	21
AROCLOR 1254	FB	0.001	0.001	0.000	0.000	12

Table 3-9
Laboratory Analytical Results
Pesticides / Polychlorinated Biphenyls - Operational Days
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Station	Mean Concentration	Maximum Concentration	Standard Deviation	90th Percentile	Number of Samples
AROCLOR 1260	A	0.001	0.001	0.000	0.000	21
AROCLOR 1260	B	0.001	0.001	0.000	0.000	21
AROCLOR 1260	C	0.001	0.001	0.000	0.000	21
AROCLOR 1260	D	0.001	0.001	0.000	0.000	21
AROCLOR 1260	E	0.001	0.001	0.000	0.000	13
AROCLOR 1260	F	0.001	0.001	0.000	0.000	21
AROCLOR 1260	FB	0.001	0.001	0.000	0.000	12

Table 3-10
Laboratory Analytical Results
Pesticides / Polychlorinated Biphenyls - Non-Operational Days
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Station	Mean Concentration	Maximum Concentration	Standard Deviation	90th Percentile	Number of Samples
4,4'-DDD	A	0.000	0.000	0.000	0.000	9
4,4'-DDD	B	0.000	0.000	0.000	0.000	9
4,4'-DDD	C	0.000	0.000	0.000	0.000	9
4,4'-DDD	D	0.000	0.000	0.000	0.000	9
4,4'-DDD	E	0.000	0.000	0.000	0.000	5
4,4'-DDD	F	0.000	0.000	0.000	0.000	9
4,4'-DDD	FB	0.000	0.000	0.000	0.000	7
4,4'-DDE	A	0.000	0.000	0.000	0.000	9
4,4'-DDE	B	0.000	0.000	0.000	0.000	9
4,4'-DDE	C	0.000	0.000	0.000	0.000	9
4,4'-DDE	D	0.000	0.000	0.000	0.000	9
4,4'-DDE	E	0.000	0.000	0.000	0.000	5
4,4'-DDE	F	0.000	0.000	0.000	0.000	9
4,4'-DDE	FB	0.000	0.000	0.000	0.000	7

Table 3-10
Laboratory Analytical Results
Pesticides / Polychlorinated Biphenyls - Non-Operational Days
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Station	Mean Concentration	Maximum Concentration	Standard Deviation	90th Percentile	Number of Samples
4,4'-DDT	A	0.000	0.000	0.000	0.000	9
4,4'-DDT	B	0.000	0.000	0.000	0.000	9
4,4'-DDT	C	0.000	0.000	0.000	0.000	9
4,4'-DDT	D	0.000	0.000	0.000	0.000	9
4,4'-DDT	E	0.000	0.000	0.000	0.000	5
4,4'-DDT	F	0.000	0.000	0.000	0.000	9
4,4'-DDT	FB	0.000	0.000	0.000	0.000	7
ALDRIN	A	0.000	0.000	0.000	0.000	9
ALDRIN	B	0.000	0.000	0.000	0.000	9
ALDRIN	C	0.000	0.000	0.000	0.000	9
ALDRIN	D	0.000	0.000	0.000	0.000	9
ALDRIN	E	0.000	0.000	0.000	0.000	5
ALDRIN	F	0.000	0.000	0.000	0.000	9
ALDRIN	FB	0.000	0.000	0.000	0.000	7

Table 3-10
Laboratory Analytical Results
Pesticides / Polychlorinated Biphenyls - Non-Operational Days
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Station	Mean Concentration	Maximum Concentration	Standard Deviation	90th Percentile	Number of Samples
AROCLOR 1242	A	0.001	0.001	0.000	0.000	9
AROCLOR 1242	B	0.001	0.001	0.000	0.000	9
AROCLOR 1242	C	0.001	0.001	0.000	0.000	9
AROCLOR 1242	D	0.001	0.001	0.000	0.000	9
AROCLOR 1242	E	0.001	0.001	0.000	0.000	5
AROCLOR 1242	F	0.001	0.001	0.000	0.000	9
AROCLOR 1242	FB	0.001	0.001	0.000	0.000	7
AROCLOR 1254	A	0.001	0.001	0.000	0.000	9
AROCLOR 1254	B	0.001	0.001	0.000	0.000	9
AROCLOR 1254	C	0.001	0.001	0.000	0.000	9
AROCLOR 1254	D	0.001	0.001	0.000	0.000	9
AROCLOR 1254	E	0.001	0.001	0.000	0.000	5
AROCLOR 1254	F	0.001	0.001	0.000	0.000	9
AROCLOR 1254	FB	0.001	0.001	0.000	0.000	7

Table 3-10
Laboratory Analytical Results
Pesticides / Polychlorinated Biphenyls - Non-Operational Days
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Station	Mean Concentration	Maximum Concentration	Standard Deviation	90th Percentile	Number of Samples
AROCLOR 1260	A	0.001	0.001	0.000	0.000	9
AROCLOR 1260	B	0.001	0.001	0.000	0.000	9
AROCLOR 1260	C	0.001	0.001	0.000	0.000	9
AROCLOR 1260	D	0.001	0.001	0.000	0.000	9
AROCLOR 1260	E	0.001	0.001	0.000	0.000	5
AROCLOR 1260	F	0.002	0.010	0.003	0.002	9
AROCLOR 1260	FB	0.001	0.001	0.000	0.000	7

Table 3-11
Laboratory Analytical Results
Pesticides / Polychlorinated Biphenyls - Total
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Station	Mean Concentration	Maximum Concentration	Standard Deviation	90th Percentile	Number of Samples
4,4'-DDD	A	0.000	0.000	0.000	0.000	30
4,4'-DDD	B	0.000	0.000	0.000	0.000	30
4,4'-DDD	C	0.000	0.000	0.000	0.000	30
4,4'-DDD	D	0.000	0.000	0.000	0.000	30
4,4'-DDD	E	0.000	0.000	0.000	0.000	18
4,4'-DDD	F	0.000	0.000	0.000	0.000	30
4,4'-DDD	FB	0.000	0.000	0.000	0.000	19
4,4'-DDE	A	0.000	0.000	0.000	0.000	30
4,4'-DDE	B	0.000	0.000	0.000	0.000	30
4,4'-DDE	C	0.000	0.000	0.000	0.000	30
4,4'-DDE	D	0.000	0.000	0.000	0.000	30
4,4'-DDE	E	0.000	0.000	0.000	0.000	18
4,4'-DDE	F	0.000	0.000	0.000	0.000	30
4,4'-DDE	FB	0.000	0.000	0.000	0.000	19

Table 3-11
Laboratory Analytical Results
Pesticides / Polychlorinated Biphenyls - Total
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Station	Mean Concentration	Maximum Concentration	Standard Deviation	90th Percentile	Number of Samples
4,4'-DDT	A	0.000	0.000	0.000	0.000	30
4,4'-DDT	B	0.000	0.000	0.000	0.000	30
4,4'-DDT	C	0.000	0.000	0.000	0.000	30
4,4'-DDT	D	0.000	0.000	0.000	0.000	30
4,4'-DDT	E	0.000	0.000	0.000	0.000	18
4,4'-DDT	F	0.000	0.000	0.000	0.000	30
4,4'-DDT	FB	0.000	0.000	0.000	0.000	19
ALDRIN	A	0.000	0.000	0.000	0.000	30
ALDRIN	B	0.000	0.000	0.000	0.000	30
ALDRIN	C	0.000	0.000	0.000	0.000	30
ALDRIN	D	0.000	0.000	0.000	0.000	30
ALDRIN	E	0.000	0.000	0.000	0.000	18
ALDRIN	F	0.000	0.000	0.000	0.000	30
ALDRIN	FB	0.000	0.000	0.000	0.000	19

Table 3-11
Laboratory Analytical Results
Pesticides / Polychlorinated Biphenyls - Total
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Station	Mean Concentration	Maximum Concentration	Standard Deviation	90th Percentile	Number of Samples
AROCLOR 1242	A	0.001	0.001	0.000	0.000	30
AROCLOR 1242	B	0.001	0.001	0.000	0.000	30
AROCLOR 1242	C	0.001	0.001	0.000	0.000	30
AROCLOR 1242	D	0.001	0.001	0.000	0.000	30
AROCLOR 1242	E	0.001	0.001	0.000	0.000	18
AROCLOR 1242	F	0.001	0.001	0.000	0.000	30
AROCLOR 1242	FB	0.001	0.001	0.000	0.000	19
AROCLOR 1254	A	0.001	0.001	0.000	0.000	30
AROCLOR 1254	B	0.001	0.001	0.000	0.000	30
AROCLOR 1254	C	0.001	0.001	0.000	0.000	30
AROCLOR 1254	D	0.001	0.001	0.000	0.000	30
AROCLOR 1254	E	0.001	0.001	0.000	0.000	18
AROCLOR 1254	F	0.001	0.001	0.000	0.000	30
AROCLOR 1254	FB	0.001	0.001	0.000	0.000	19

Table 3-11
Laboratory Analytical Results
Pesticides / Polychlorinated Biphenyls - Total
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Station	Mean Concentration	Maximum Concentration	Standard Deviation	90th Percentile	Number of Samples
AROCLOR 1260	A	0.001	0.001	0.000	0.000	30
AROCLOR 1260	B	0.001	0.001	0.000	0.000	30
AROCLOR 1260	C	0.001	0.001	0.000	0.000	30
AROCLOR 1260	D	0.001	0.001	0.000	0.000	30
AROCLOR 1260	E	0.001	0.001	0.000	0.000	18
AROCLOR 1260	F	0.001	0.010	0.002	0.000	30
AROCLOR 1260	FB	0.001	0.001	0.000	0.000	19

Table 3-12
Laboratory Analytical Results
Metals - Operational Days
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Station	Mean Concentration	Maximum Concentration	Standard Deviation	90th Percentile	Number of Samples
ALUMINUM	A	1.208	1.236	0.021	0.006	30
ALUMINUM	B	1.202	1.235	0.021	0.006	30
ALUMINUM	C	1.202	1.238	0.016	0.005	30
ALUMINUM	D	1.205	1.250	0.020	0.006	30
ALUMINUM	E	1.207	1.252	0.026	0.010	19
ALUMINUM	F	1.183	1.224	0.017	0.005	29
ALUMINUM	FB	1.199	1.220	0.020	0.008	18
ANTIMONY	A	0.242	0.248	0.004	0.001	30
ANTIMONY	B	0.240	0.247	0.004	0.001	30
ANTIMONY	C	0.240	0.248	0.003	0.001	30
ANTIMONY	D	0.241	0.250	0.004	0.001	30
ANTIMONY	E	0.241	0.251	0.005	0.002	19
ANTIMONY	F	0.237	0.245	0.004	0.001	29
ANTIMONY	FB	0.240	0.244	0.004	0.002	18

TSPM = Total Suspended Particulate Matter

ug/m3 = micrograms / cubic meter

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Table 3-12
Laboratory Analytical Results
Metals - Operational Days
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Station	Mean Concentration	Maximum Concentration	Standard Deviation	90th Percentile	Number of Samples
ARSENIC	A	0.001	0.002	0.000	0.000	30
ARSENIC	B	0.001	0.003	0.000	0.000	30
ARSENIC	C	0.001	0.002	0.000	0.000	30
ARSENIC	D	0.001	0.002	0.000	0.000	30
ARSENIC	E	0.001	0.002	0.000	0.000	19
ARSENIC	F	0.001	0.003	0.000	0.000	29
ARSENIC	FB	0.001	0.001	0.000	0.000	18
BERYLLIUM	A	0.006	0.006	0.000	0.000	30
BERYLLIUM	B	0.006	0.006	0.000	0.000	30
BERYLLIUM	C	0.006	0.006	0.000	0.000	30
BERYLLIUM	D	0.006	0.006	0.000	0.000	30
BERYLLIUM	E	0.006	0.006	0.000	0.000	19
BERYLLIUM	F	0.006	0.006	0.000	0.000	29
BERYLLIUM	FB	0.006	0.006	0.000	0.000	18

TSPM = Total Suspended Particulate Matter

ug/m3 = micrograms / cubic meter

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Table 3-12
Laboratory Analytical Results
Metals - Operational Days
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Station	Mean Concentration	Maximum Concentration	Standard Deviation	90th Percentile	Number of Samples
COPPER	A	0.170	0.528	0.151	0.045	30
COPPER	B	0.089	0.261	0.040	0.012	30
COPPER	C	0.146	0.379	0.082	0.025	30
COPPER	D	0.155	0.480	0.090	0.027	30
COPPER	E	0.195	0.417	0.119	0.045	19
COPPER	F	0.077	0.280	0.045	0.014	29
COPPER	FB	0.009	0.066	0.014	0.005	18
LEAD	A	0.016	0.066	0.011	0.003	30
LEAD	B	0.013	0.044	0.006	0.002	30
LEAD	C	0.017	0.061	0.013	0.004	30
LEAD	D	0.016	0.038	0.009	0.003	30
LEAD	E	0.017	0.039	0.011	0.004	19
LEAD	F	0.025	0.080	0.019	0.006	29
LEAD	FB	0.012	0.012	0.000	0.000	18

TSPM = Total Suspended Particulate Matter

ug/m3 = micrograms / cubic meter

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Table 3-12
Laboratory Analytical Results
Metals - Operational Days
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Station	Mean Concentration	Maximum Concentration	Standard Deviation	90th Percentile	Number of Samples
MANGANESE	A	0.018	0.054	0.014	0.004	30
MANGANESE	B	0.015	0.044	0.010	0.003	30
MANGANESE	C	0.036	0.123	0.026	0.008	30
MANGANESE	D	0.016	0.045	0.012	0.003	30
MANGANESE	E	0.018	0.046	0.014	0.005	19
MANGANESE	F	0.025	0.103	0.020	0.006	29
MANGANESE	FB	0.006	0.006	0.000	0.000	18
MANGANESE	QC	0.000	0.000			1
MERCURY	A	0.001	0.001	0.000	0.000	30
MERCURY	B	0.001	0.001	0.000	0.000	30
MERCURY	C	0.001	0.001	0.000	0.000	30
MERCURY	D	0.001	0.001	0.000	0.000	30
MERCURY	E	0.001	0.001	0.000	0.000	19
MERCURY	F	0.001	0.001	0.000	0.000	29
MERCURY	FB	0.001	0.001	0.000	0.000	18

TSPM = Total Suspended Particulate Matter
ug/m3 = micrograms / cubic meter

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Table 3-12
Laboratory Analytical Results
Metals - Operational Days
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Station	Mean Concentration	Maximum Concentration	Standard Deviation	90th Percentile	Number of Samples
NICKEL	A	0.063	0.065	0.001	0.000	30
NICKEL	B	0.063	0.065	0.001	0.000	30
NICKEL	C	0.063	0.065	0.001	0.000	30
NICKEL	D	0.063	0.065	0.001	0.000	30
NICKEL	E	0.063	0.065	0.001	0.001	19
NICKEL	F	0.061	0.064	0.001	0.000	29
NICKEL	FB	0.062	0.064	0.001	0.000	18
VANADIUM	A	0.121	0.124	0.002	0.001	30
VANADIUM	B	0.120	0.124	0.002	0.001	30
VANADIUM	C	0.120	0.124	0.002	0.000	30
VANADIUM	D	0.120	0.125	0.002	0.001	30
VANADIUM	E	0.121	0.125	0.003	0.001	19
VANADIUM	F	0.118	0.123	0.002	0.001	29
VANADIUM	FB	0.120	0.122	0.002	0.001	18

TSPM = Total Suspended Particulate Matter

ug/m3 = micrograms / cubic meter

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Table 3-12
Laboratory Analytical Results
Metals - Operational Days
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Station	Mean Concentration	Maximum Concentration	Standard Deviation	90th Percentile	Number of Samples
ZINC	A	0.047	0.116	0.025	0.008	30
ZINC	B	0.044	0.110	0.021	0.006	30
ZINC	C	0.071	0.179	0.034	0.010	30
ZINC	D	0.049	0.109	0.024	0.007	30
ZINC	E	0.056	0.122	0.029	0.011	19
ZINC	F	0.064	0.162	0.033	0.010	29
ZINC	FB	0.001	0.005	0.001	0.000	18

TSPM = Total Suspended Particulate Matter

ug/m3 = micrograms / cubic meter

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Table 3-13
Laboratory Analytical Results
Metals - Non-Operational Days
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Station	Mean Concentration	Maximum Concentration	Standard Deviation	90th Percentile	Number of Samples
ALUMINUM	A	1.219	1.240	0.021	0.011	9
ALUMINUM	B	1.215	1.232	0.018	0.010	9
ALUMINUM	C	1.200	1.234	0.029	0.016	9
ALUMINUM	D	1.217	1.236	0.020	0.011	9
ALUMINUM	E	1.218	1.248	0.025	0.017	6
ALUMINUM	F	1.190	1.212	0.016	0.009	9
ALUMINUM	FB	1.209	1.224	0.017	0.012	6
ANTIMONY	A	0.244	0.248	0.004	0.002	9
ANTIMONY	B	0.243	0.247	0.004	0.002	9
ANTIMONY	C	0.240	0.247	0.006	0.003	9
ANTIMONY	D	0.243	0.247	0.004	0.002	9
ANTIMONY	E	0.244	0.250	0.005	0.003	6
ANTIMONY	F	0.238	0.242	0.003	0.002	9
ANTIMONY	FB	0.242	0.245	0.004	0.002	6

TSPM = Total Suspended Particulate Matter

ug/m3 = micrograms / cubic meter

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Table 3-13
Laboratory Analytical Results
Metals - Non-Operational Days
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Station	Mean Concentration	Maximum Concentration	Standard Deviation	90th Percentile	Number of Samples
ARSENIC	A	0.001	0.002	0.000	0.000	10
ARSENIC	B	0.001	0.001	0.000	0.000	10
ARSENIC	C	0.001	0.003	0.001	0.000	10
ARSENIC	D	0.001	0.001	0.000	0.000	10
ARSENIC	E	0.001	0.001	0.000	0.000	6
ARSENIC	F	0.001	0.002	0.000	0.000	10
ARSENIC	FB	0.001	0.001	0.000	0.000	7
BERYLLIUM	A	0.006	0.006	0.000	0.000	10
BERYLLIUM	B	0.006	0.006	0.000	0.000	10
BERYLLIUM	C	0.006	0.006	0.000	0.000	10
BERYLLIUM	D	0.006	0.006	0.000	0.000	10
BERYLLIUM	E	0.006	0.006	0.000	0.000	6
BERYLLIUM	F	0.006	0.006	0.000	0.000	10
BERYLLIUM	FB	0.006	0.006	0.000	0.000	7

TSPM = Total Suspended Particulate Matter

ug/m3 = micrograms / cubic meter

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Table 3-13
Laboratory Analytical Results
Metals - Non-Operational Days
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Station	Mean Concentration	Maximum Concentration	Standard Deviation	90th Percentile	Number of Samples
COPPER	A	0.200	0.470	0.165	0.086	10
COPPER	B	0.094	0.129	0.029	0.015	10
COPPER	C	0.170	0.546	0.142	0.074	10
COPPER	D	0.211	0.410	0.099	0.051	10
COPPER	E	0.229	0.345	0.090	0.061	6
COPPER	F	0.109	0.315	0.081	0.042	10
COPPER	FB	0.006	0.006	0.000	0.000	7
LEAD	A	0.012	0.013	0.001	0.000	10
LEAD	B	0.012	0.013	0.001	0.000	10
LEAD	C	0.012	0.013	0.001	0.000	10
LEAD	D	0.012	0.013	0.001	0.000	10
LEAD	E	0.012	0.013	0.000	0.000	6
LEAD	F	0.012	0.012	0.001	0.000	10
LEAD	FB	0.012	0.012	0.001	0.000	7

TSPM = Total Suspended Particulate Matter
ug/m3 = micrograms / cubic meter

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Table 3-13
Laboratory Analytical Results
Metals - Non-Operational Days
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Station	Mean Concentration	Maximum Concentration	Standard Deviation	90th Percentile	Number of Samples
MANGANESE	A	0.011	0.023	0.008	0.004	10
MANGANESE	B	0.009	0.018	0.005	0.003	10
MANGANESE	C	0.012	0.028	0.008	0.004	10
MANGANESE	D	0.009	0.019	0.005	0.003	10
MANGANESE	E	0.009	0.019	0.006	0.004	6
MANGANESE	F	0.013	0.028	0.009	0.005	10
MANGANESE	FB	0.007	0.013	0.003	0.002	7
MERCURY	A	0.001	0.001	0.000	0.000	10
MERCURY	B	0.001	0.001	0.000	0.000	10
MERCURY	C	0.001	0.001	0.000	0.000	10
MERCURY	D	0.001	0.001	0.000	0.000	10
MERCURY	E	0.001	0.001	0.000	0.000	6
MERCURY	F	0.001	0.001	0.000	0.000	10
MERCURY	FB	0.001	0.001	0.000	0.000	7

TSPM = Total Suspended Particulate Matter

ug/m3 = micrograms / cubic meter

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Table 3-13
Laboratory Analytical Results
Metals - Non-Operational Days
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Station	Mean Concentration	Maximum Concentration	Standard Deviation	90th Percentile	Number of Samples
NICKEL	A	0.064	0.065	0.001	0.001	10
NICKEL	B	0.063	0.065	0.001	0.001	10
NICKEL	C	0.063	0.065	0.002	0.001	10
NICKEL	D	0.063	0.065	0.001	0.001	10
NICKEL	E	0.063	0.065	0.001	0.001	6
NICKEL	F	0.062	0.063	0.001	0.001	10
NICKEL	FB	0.063	0.065	0.001	0.001	7
VANADIUM	A	0.122	0.124	0.002	0.001	10
VANADIUM	B	0.122	0.123	0.002	0.001	10
VANADIUM	C	0.120	0.124	0.003	0.002	10
VANADIUM	D	0.122	0.124	0.002	0.001	10
VANADIUM	E	0.122	0.125	0.003	0.002	6
VANADIUM	F	0.119	0.121	0.002	0.001	10
VANADIUM	FB	0.121	0.123	0.002	0.001	7

TSPM = Total Suspended Particulate Matter

ug/m3 = micrograms / cubic meter

IT Job No. 773247

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Table 3-13
Laboratory Analytical Results
Metals - Non-Operational Days
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Station	Mean Concentration	Maximum Concentration	Standard Deviation	90th Percentile	Number of Samples
ZINC	A	0.042	0.095	0.032	0.017	10
ZINC	B	0.037	0.078	0.025	0.013	10
ZINC	C	0.053	0.113	0.037	0.019	10
ZINC	D	0.034	0.065	0.019	0.010	10
ZINC	E	0.031	0.044	0.013	0.009	6
ZINC	F	0.064	0.182	0.065	0.034	10
ZINC	FB	0.001	0.004	0.001	0.001	7

TSPM = Total Suspended Particulate Matter

ug/m3 = micrograms / cubic meter

IT Job No. 773247

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Table 3-14
Laboratory Analytical Results
Metals - Total
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Station	Mean Concentration	Maximum Concentration	Standard Deviation	90th Percentile	Number of Samples
ALUMINUM	A	1.210	1.240	0.021	0.006	39
ALUMINUM	B	1.205	1.235	0.021	0.005	39
ALUMINUM	C	1.202	1.238	0.019	0.005	39
ALUMINUM	D	1.208	1.250	0.020	0.005	39
ALUMINUM	E	1.210	1.252	0.026	0.008	25
ALUMINUM	F	1.185	1.224	0.017	0.005	38
ALUMINUM	FB	1.201	1.224	0.020	0.007	24
ANTIMONY	A	0.242	0.248	0.004	0.001	39
ANTIMONY	B	0.241	0.247	0.004	0.001	39
ANTIMONY	C	0.240	0.248	0.004	0.001	39
ANTIMONY	D	0.241	0.250	0.004	0.001	39
ANTIMONY	E	0.242	0.251	0.005	0.002	25
ANTIMONY	F	0.237	0.245	0.003	0.001	38
ANTIMONY	FB	0.240	0.245	0.004	0.001	24

TSPM = Total Suspended Particulate Matter

ug/m3 = micrograms / cubic meter

IT Job No. 773247

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Table 3-14
Laboratory Analytical Results
Metals - Total
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Station	Mean Concentration	Maximum Concentration	Standard Deviation	90th Percentile	Number of Samples
ARSENIC	A	0.001	0.002	0.000	0.000	40
ARSENIC	B	0.001	0.003	0.000	0.000	40
ARSENIC	C	0.001	0.003	0.000	0.000	40
ARSENIC	D	0.001	0.002	0.000	0.000	40
ARSENIC	E	0.001	0.002	0.000	0.000	25
ARSENIC	F	0.001	0.003	0.000	0.000	39
ARSENIC	FB	0.001	0.001	0.000	0.000	25
BERYLLIUM	A	0.006	0.006	0.000	0.000	40
BERYLLIUM	B	0.006	0.006	0.000	0.000	40
BERYLLIUM	C	0.006	0.006	0.000	0.000	40
BERYLLIUM	D	0.006	0.006	0.000	0.000	40
BERYLLIUM	E	0.006	0.006	0.000	0.000	25
BERYLLIUM	F	0.006	0.006	0.000	0.000	39
BERYLLIUM	FB	0.006	0.006	0.000	0.000	25

TSPM = Total Suspended Particulate Matter

ug/m3 = micrograms / cubic meter

IT Job No. 773247

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Table 3-14
Laboratory Analytical Results
Metals - Total
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Station	Mean Concentration	Maximum Concentration	Standard Deviation	90th Percentile	Number of Samples
COPPER	A	0.178	0.528	0.153	0.040	40
COPPER	B	0.090	0.261	0.037	0.010	40
COPPER	C	0.152	0.546	0.099	0.026	40
COPPER	D	0.169	0.480	0.094	0.025	40
COPPER	E	0.203	0.417	0.112	0.037	25
COPPER	F	0.085	0.315	0.057	0.015	39
COPPER	FB	0.008	0.066	0.012	0.004	25
LEAD	A	0.015	0.066	0.010	0.003	40
LEAD	B	0.013	0.044	0.005	0.001	40
LEAD	C	0.016	0.061	0.011	0.003	40
LEAD	D	0.015	0.038	0.008	0.002	40
LEAD	E	0.016	0.039	0.010	0.003	25
LEAD	F	0.021	0.080	0.017	0.004	39
LEAD	FB	0.012	0.012	0.000	0.000	25

TSPM = Total Suspended Particulate Matter

ug/m3 = micrograms / cubic meter

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Table 3-14
Laboratory Analytical Results
Metals - Total
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Station	Mean Concentration	Maximum Concentration	Standard Deviation	90th Percentile	Number of Samples
MANGANESE	A	0.017	0.054	0.013	0.003	40
MANGANESE	B	0.013	0.044	0.010	0.002	40
MANGANESE	C	0.030	0.123	0.025	0.007	40
MANGANESE	D	0.014	0.045	0.011	0.003	40
MANGANESE	E	0.016	0.046	0.013	0.004	25
MANGANESE	F	0.022	0.103	0.019	0.005	39
MANGANESE	FB	0.006	0.013	0.001	0.000	25
MANGANESE	QC	0.000	0.000			1
MERCURY	A	0.001	0.001	0.000	0.000	40
MERCURY	B	0.001	0.001	0.000	0.000	40
MERCURY	C	0.001	0.001	0.000	0.000	40
MERCURY	D	0.001	0.001	0.000	0.000	40
MERCURY	E	0.001	0.001	0.000	0.000	25
MERCURY	F	0.001	0.001	0.000	0.000	39
MERCURY	FB	0.001	0.001	0.000	0.000	25

TSPM = Total Suspended Particulate Matter

ug/m3 = micrograms / cubic meter

IT Job No. 773247

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Table 3-14
Laboratory Analytical Results
Metals - Total
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Station	Mean Concentration	Maximum Concentration	Standard Deviation	90th Percentile	Number of Samples
NICKEL	A	0.063	0.065	0.001	0.000	40
NICKEL	B	0.063	0.065	0.001	0.000	40
NICKEL	C	0.063	0.065	0.001	0.000	40
NICKEL	D	0.063	0.065	0.001	0.000	40
NICKEL	E	0.063	0.065	0.001	0.000	25
NICKEL	F	0.062	0.064	0.001	0.000	39
NICKEL	FB	0.063	0.065	0.001	0.000	25
VANADIUM	A	0.121	0.124	0.002	0.001	40
VANADIUM	B	0.121	0.124	0.002	0.001	40
VANADIUM	C	0.120	0.124	0.002	0.001	40
VANADIUM	D	0.121	0.125	0.002	0.001	40
VANADIUM	E	0.121	0.125	0.003	0.001	25
VANADIUM	F	0.118	0.123	0.002	0.000	39
VANADIUM	FB	0.120	0.123	0.002	0.001	25

TSPM = Total Suspended Particulate Matter

ug/m3 = micrograms / cubic meter

IT Job No. 773247

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Table 3-14
Laboratory Analytical Results
Metals - Total
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Station	Mean Concentration	Maximum Concentration	Standard Deviation	90th Percentile	Number of Samples
ZINC	A	0.046	0.116	0.027	0.007	40
ZINC	B	0.043	0.110	0.022	0.006	40
ZINC	C	0.067	0.179	0.035	0.009	40
ZINC	D	0.045	0.109	0.024	0.006	40
ZINC	E	0.050	0.122	0.028	0.009	25
ZINC	F	0.064	0.182	0.042	0.011	39
ZINC	FB	0.001	0.005	0.001	0.000	25

TSPM = Total Suspended Particulate Matter

ug/m3 = micrograms / cubic meter

IT Job No. 773247

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Table 3-15
Summary of Maximum Concentrations
Hunters Point Naval Shipyard
San Francisco, California

Analytical Category	Constituent	Sample Date	Predominant Wind Direction ¹	Upwind Station	Upwind Analytical Result (ug/m ³)	Downwind Station	Downwind Analytical Result (ug/m ³)	Site Contribution (ug/m ³)	Action Level (ug/m ³)	Action Level Exceedance (ug/m ³)	Comment
VOC	Benzene	10/01/98	SW	F	1.21	E	1.18	NA	0.65	NA	No exceedence
VOC	Benzene	10/04/98	SW	F	2.72	D	3.00	0.28	0.65	NA	No exceedence
VOC	Benzene	10/07/98	WSW	C	1.15	E	0.70	NA	0.65	NA	No exceedence
VOC	Benzene	10/10/98	WSW	C	1.47	D	1.18	0.29	0.65	NA	No exceedence
VOC	Benzene	10/13/98	WSW	C	1.63	D	1.31	NA	0.65	NA	No exceedence
VOC	Benzene	10/16/98	NW	B	1.25	F	1.21	NA	0.65	NA	No exceedence
VOC	Benzene	10/19/98	WSW	C	3.42	D	3.23	NA	0.65	NA	No exceedence
VOC	Benzene	10/22/98	SW	C	1.5	B	1.34	NA	0.65	NA	No exceedence
VOC	Benzene	10/25/98	WSW	A	1.63	D	2.36	0.73	0.65	0.08	Refer to Subsection 3.1.1.1
VOC	Benzene	10/31/98	SW	C	2.75	B	2.49	NA	0.65	NA	No exceedence
VOC	Benzene	11/03/98	SW	C	2.01	B	1.82	NA	0.65	NA	No exceedence
VOC	Benzene	11/06/98	SW	F	0.83	D	1.60	0.77	0.65	0.12	Refer to Subsection 3.1.1.1
VOC	Benzene	11/09/98	NW	B	1.98	F	1.98	NA	0.65	NA	No exceedence
VOC	Benzene	11/12/98	NNE	B	3.55	C	3.51	NA	0.65	NA	No exceedence
VOC	Benzene	11/15/98	ESE	E	1.79	A	1.85	0.06	0.65	NA	No exceedence
VOC	Benzene	11/18/98	NNE	D	2.27	F	2.65	0.38	0.65	NA	No exceedence
VOC	Benzene	11/21/98	ESE	D	0.8	A	1.02	0.22	0.65	NA	No exceedence
VOC	Benzene	11/30/98	ESE	E	0.99	A	1.47	0.48	0.65	NA	No exceedence
VOC	Benzene	12/03/98	WSW	C	1.63	D	1.95	0.32	0.65	NA	No exceedence
VOC	Benzene	12/06/98	WNW	A	2.84	F	2.43	NA	0.65	NA	No exceedence
VOC	Benzene	12/09/98	NNW	B	2.24	F	2.14	NA	0.65	NA	No exceedence
VOC	Benzene	12/12/98	NW	B	3.35	F	2.97	NA	0.65	NA	No exceedence
VOC	Benzene	12/15/98	NNW	B	2.91	F	2.65	NA	0.65	NA	No exceedence

Only daily maximum upwind and downwind values were used.

¹Direction wind is from.

WSW: West-southwest SW: Southwest SSW: South-southwest

² See Subsection 3.1.1.1

Table 3-15
Summary of Maximum Concentrations
Hunters Point Naval Shipyard
San Francisco, California

Analytical Category	Constituent	Sample Date	Predominant Wind Direction ¹	Upwind Station	Upwind Analytical Result (ug/m ³)	Downwind Station	Downwind Analytical Result (ug/m ³)	Site Contribution (ug/m ³)	Action Level (ug/m ³)	Action Level Exceedance (ug/m ³)	Comment
VOC	Benzene	12/18/98	S	C	1.44	B	1.50	0.06	0.65	NA	No exceedence
VOC	Benzene	12/21/98	N	B	2.49	C	2.78	0.29	0.65	NA	No exceedence
VOC	Benzene	12/27/98	NE	D	3.26	F	3.23	NA	0.65	NA	No exceedence
VOC	Benzene	12/30/98	WSW	C	1.92	D	1.76	NA	0.65	NA	No exceedence
SVOC	Bis(2-ethylhexyl) phthalate	11/24/98	SW	F	ND	E	0.032	0.032	0.018	0.012	Refer to Subsection 3.1.2.5
SVOC	Bis(2-ethylhexyl) phthalate	12/12/98	NW	B	ND	D	0.019	0.019	0.018	0.001	Refer to Subsection 3.1.2.5
SVOC	Bis(2-ethylhexyl) phthalate	12/21/98	N	D	0.123	F	ND	NA	0.018	NA	No exceedence
Metals	Manganese	10/19/98	WSW	C	0.062	E	0.046	NA	0.05	NA	No exceedence
Metals	Manganese	11/09/98	NW	B	ND	F	0.017	0.017	0.05	NA	No exceedence
Metals	Manganese	11/12/98	NNE	B	0.016	C	0.066	0.050	0.05	0.000	No exceedence
Metals	Manganese	11/18/98	NNE	B	0.021	C	0.123	0.102	0.05	0.052	Refer to Subsection 3.1.3.3
Metals	Manganese	11/24/98	SW	C	0.089	B	0.017	NA	0.05	NA	No exceedence
Metals	Manganese	12/09/98	NNW	B	0.028	F	0.038	0.010	0.05	NA	No exceedence
Metals	Manganese	12/21/98	N	D	0.045	F	0.103	0.058	0.05	0.008	Refer to Subsection 3.1.3.3

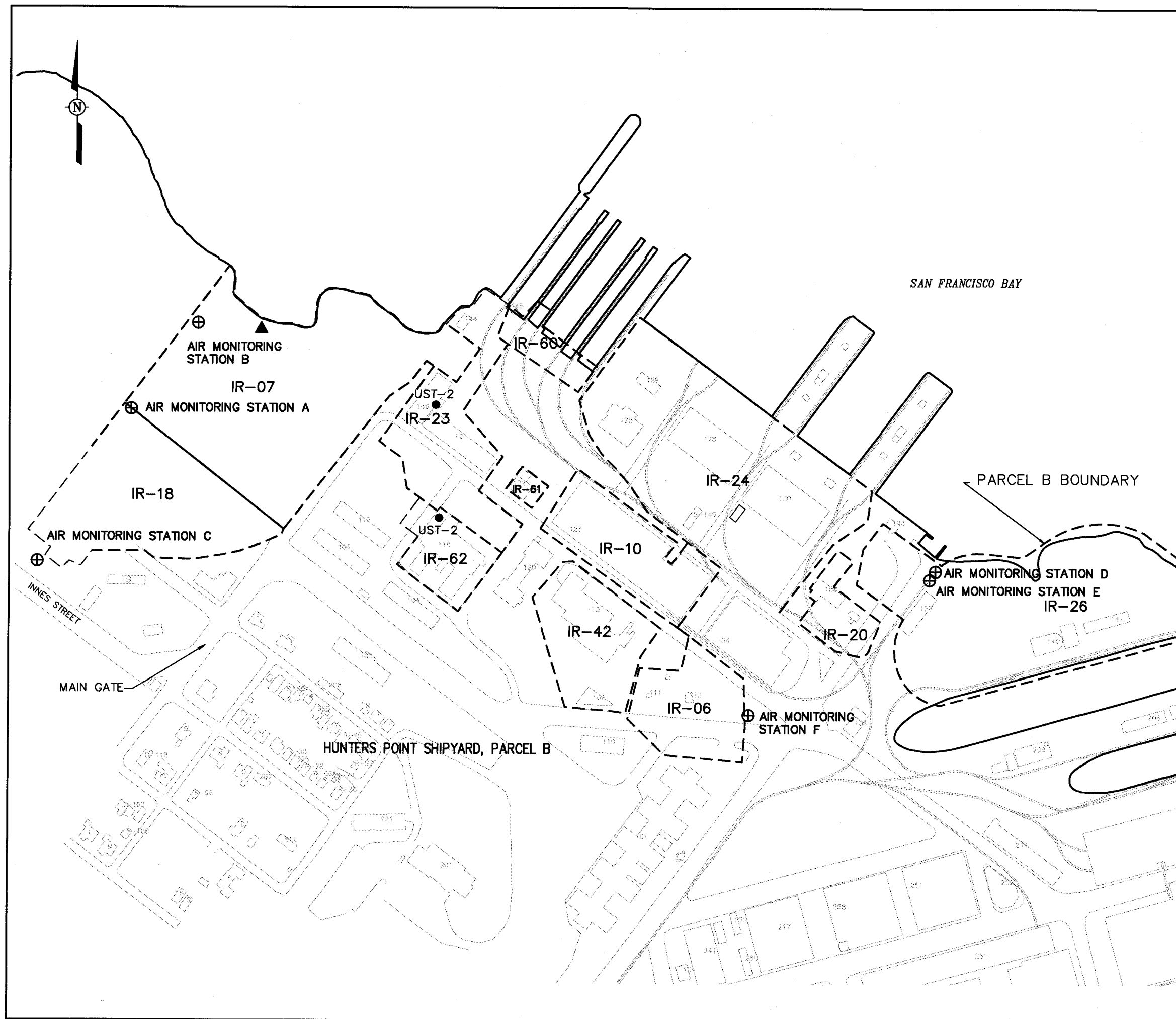
Only daily maximum upwind and downwind values were used.

¹Direction wind is from.

WSW: West-southwest SW: Southwest SSW: South-southwest

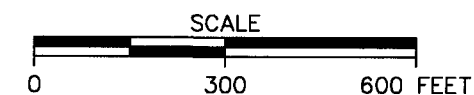
² See Subsection 3.1.1.1

FIGURES

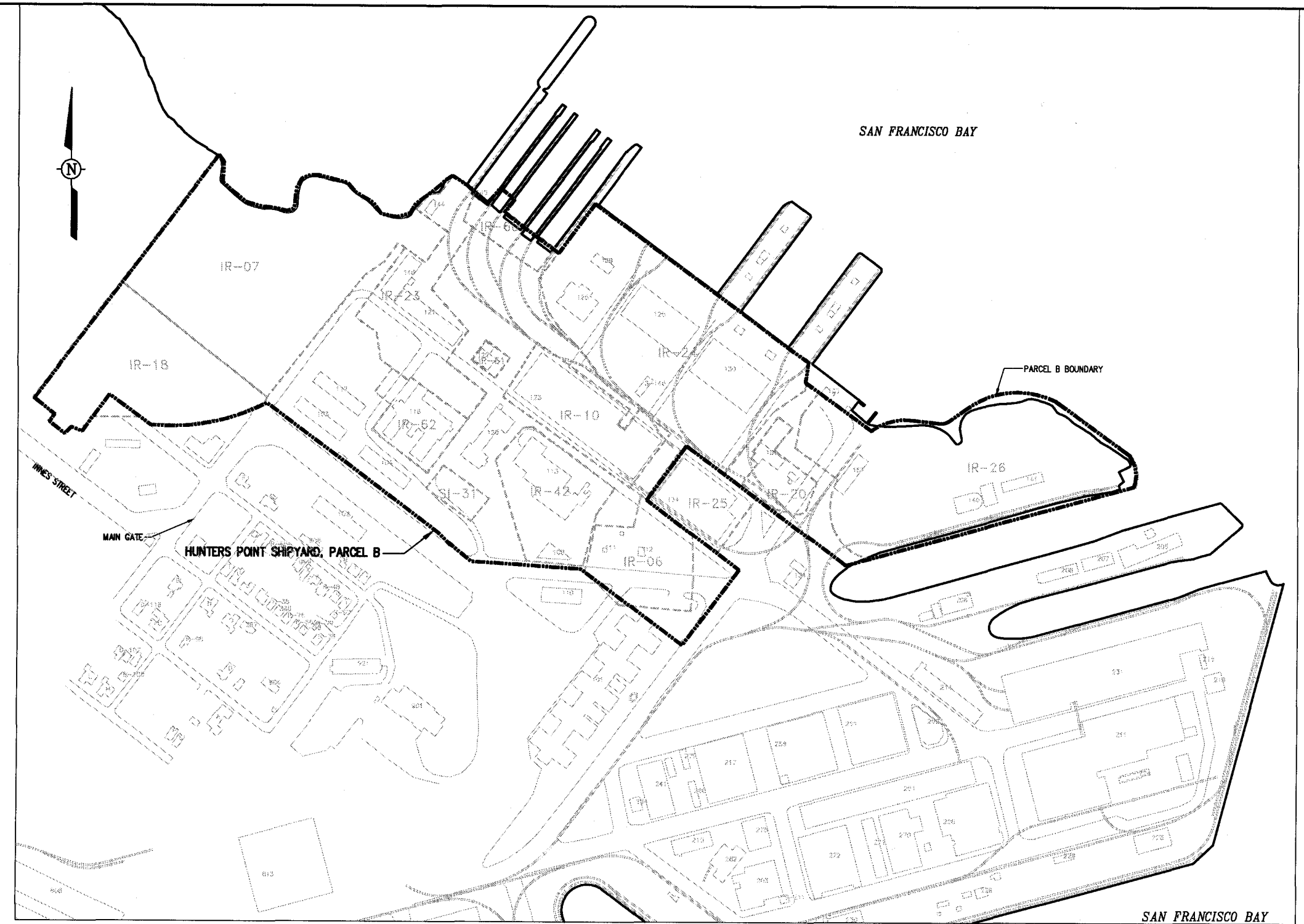
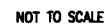
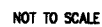


LEGEND

- ⊕ IR-7A AIR QUALITY STATION AND I.D. NUMBER
- ▲ METEOROLOGICAL STATION
- UST-2 UNDERGROUND STORAGE TANK
- IR INSTALLATION RESTORATION



DESIGNED:		4585 PACHECO BLVD. MARTINEZ, CA 94553 (510) 372-9100		DEPARTMENT OF THE NAVY ENGINEERING FIELD ACTIVITY WEST SAN BRUNO, CALIFORNIA	
DRAWN: J.A.C. 8/20/99		HUNTERS POINT SHIPYARD SAN FRANCISCO, CALIFORNIA			
CHECKED:		FIGURE 1-1 SITE VICINITY MAP QUARTERLY AIR MONITORING REPORT 4TH CALANDER QUARTER 1998			
SUBMITTED:		DATE APPROVED:	SCALE: AS NOTED	SHEET	SPEC No.
				2 2 OF 17	773247-B31



SOURCE: PARCEL B FEASIBILITY STUDY, FINAL REPORT,
HUNTERS POINT SHIPYARD, U.S. DEPARTMENT OF THE NAVY,
EFA WEST, NOVEMBER 26, 1996.

[illegible]

WIND ROSE PLOT

1998 10/01 Time: 01:00 ----- 1998 12/31 Time: 24:00

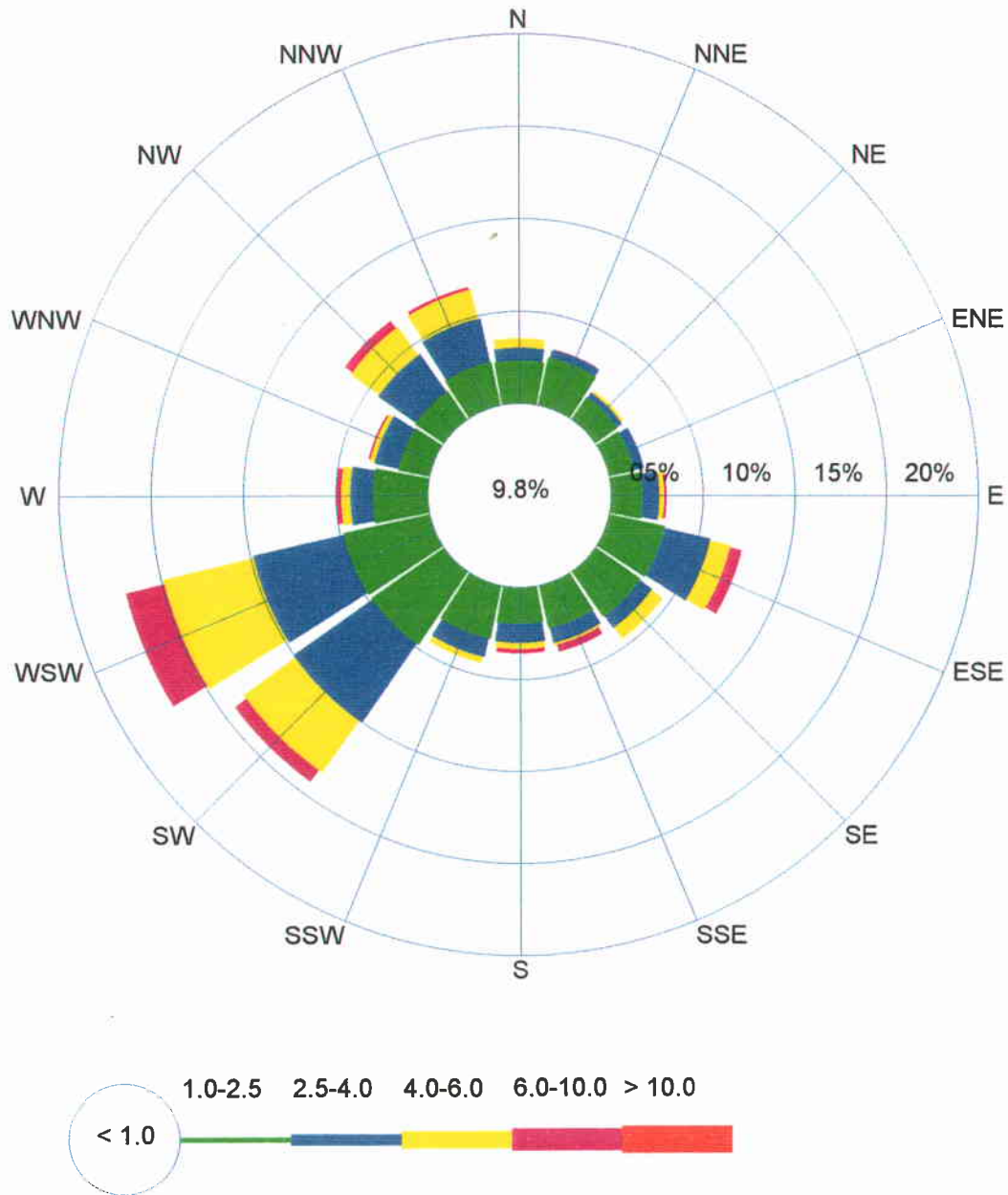


FIGURE 5-1

WIND ROSE PLOT

1998 10/01 Time: 01:00 ----- 1998 10/31 Time: 24:00

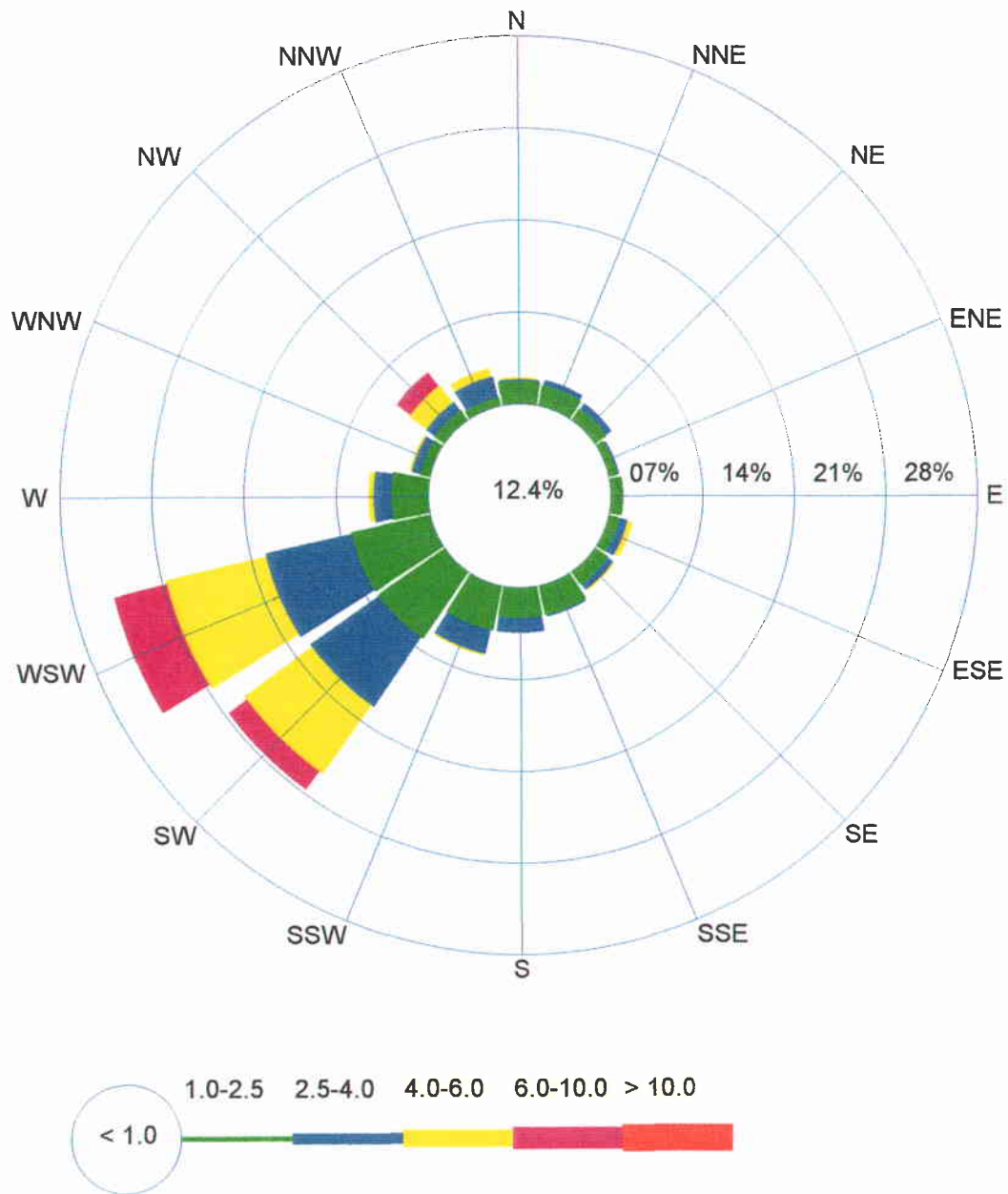


FIGURE 5-2

WIND ROSE PLOT

1998 11/01 Time: 01:00 ----- 1998 11/30 Time: 24:00

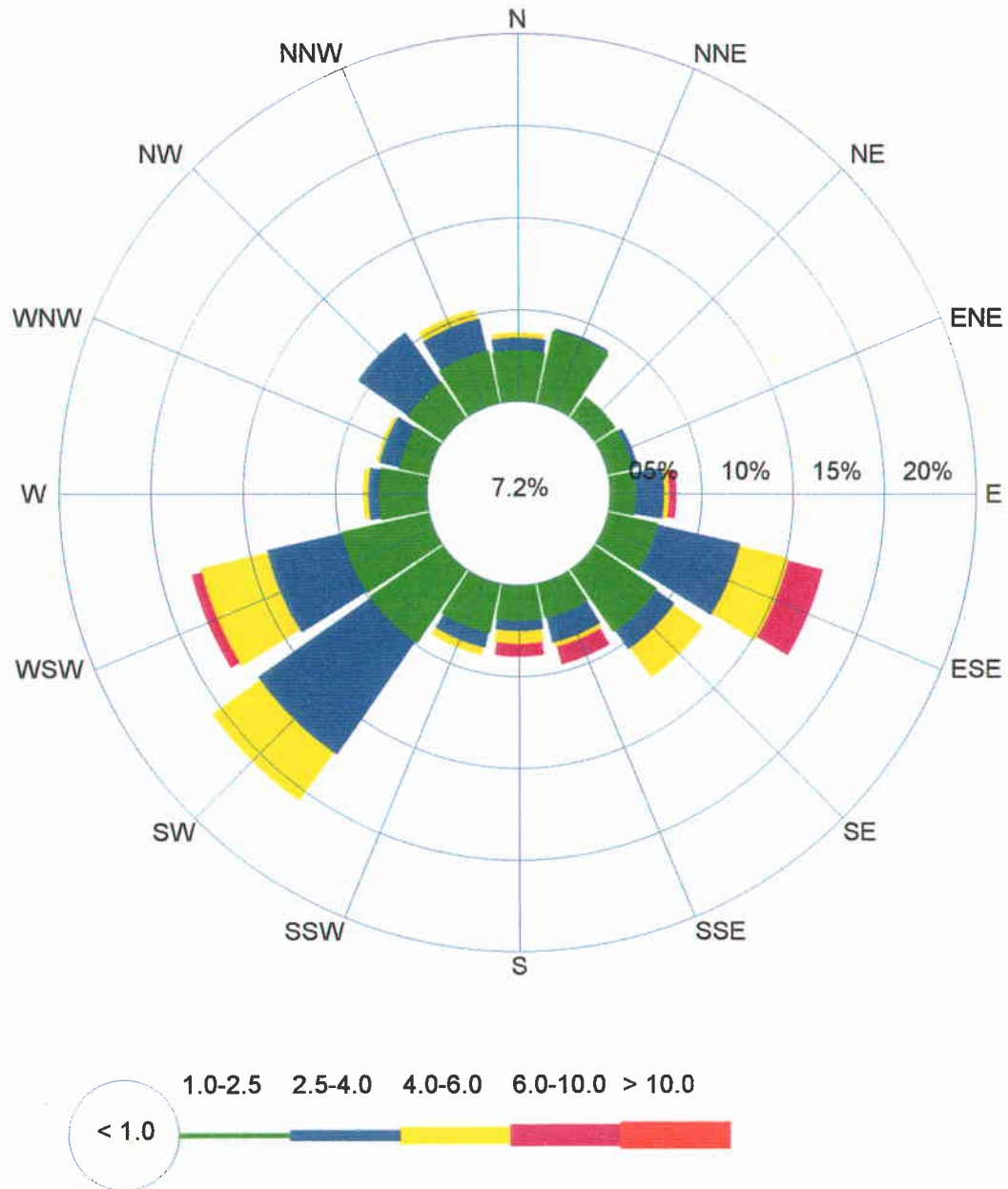


FIGURE 5-3

WIND ROSE PLOT

1998 12/01 Time: 01:00 ----- 1998 12/31 Time: 24:00

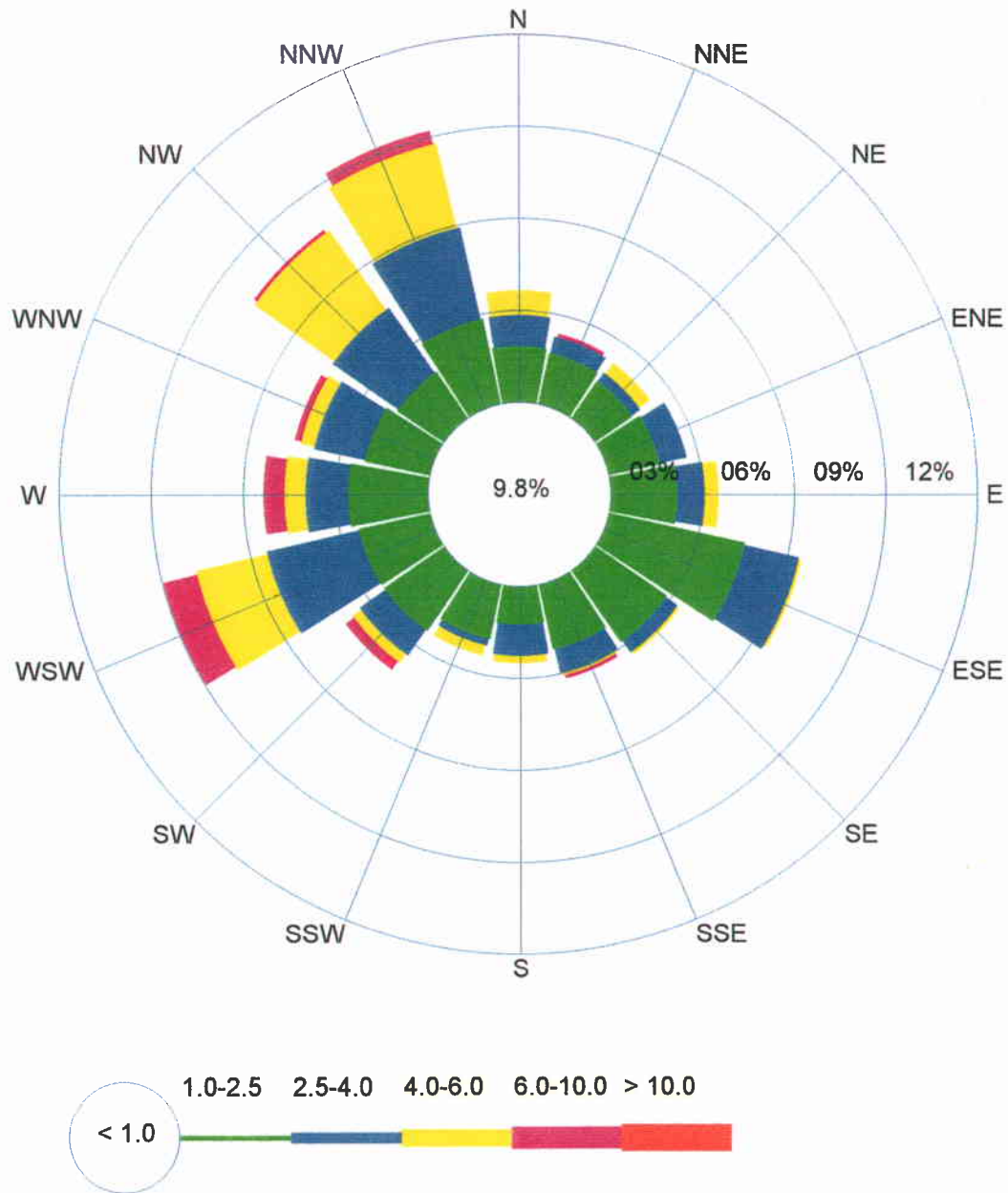


FIGURE 5-4

APPENDIX A

SUMMARY OF LABORATORY ANALYTICAL RESULTS

VOLATILE ORGANIC COMPOUNDS

Summary of Laboratory Analytical Results
Volatile Organic Compounds
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Result	Date Sampled	Station
1,1-DICHLOROETHENE	0.200	10/1/98	A
1,1-DICHLOROETHENE	0.200	10/1/98	B
1,1-DICHLOROETHENE	0.200	10/1/98	C
1,1-DICHLOROETHENE	0.200	10/1/98	D
1,1-DICHLOROETHENE	0.200	10/1/98	E
1,1-DICHLOROETHENE	0.200	10/1/98	F
1,1-DICHLOROETHENE	0.200	10/1/98	FB
1,1-DICHLOROETHENE	0.200	10/4/98	A
1,1-DICHLOROETHENE	0.200	10/4/98	B
1,1-DICHLOROETHENE	0.200	10/4/98	C
1,1-DICHLOROETHENE	0.200	10/4/98	D
1,1-DICHLOROETHENE	0.200	10/4/98	F
1,1-DICHLOROETHENE	0.200	10/4/98	FB
1,1-DICHLOROETHENE	0.200	10/7/98	A
1,1-DICHLOROETHENE	0.200	10/7/98	B
1,1-DICHLOROETHENE	0.200	10/7/98	C
1,1-DICHLOROETHENE	0.200	10/7/98	D
1,1-DICHLOROETHENE	0.200	10/7/98	E
1,1-DICHLOROETHENE	0.200	10/7/98	F
1,1-DICHLOROETHENE	0.200	10/7/98	FB
1,1-DICHLOROETHENE	0.200	10/10/98	A
1,1-DICHLOROETHENE	0.200	10/10/98	B
1,1-DICHLOROETHENE	0.200	10/10/98	C
1,1-DICHLOROETHENE	0.200	10/10/98	D
1,1-DICHLOROETHENE	0.200	10/10/98	E
1,1-DICHLOROETHENE	0.200	10/10/98	F
1,1-DICHLOROETHENE	0.200	10/13/98	A

Summary of Laboratory Analytical Results
Volatile Organic Compounds
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Result	Date Sampled	Station
1,1-DICHLOROETHENE	0.200	10/13/98	B
1,1-DICHLOROETHENE	0.200	10/13/98	C
1,1-DICHLOROETHENE	0.200	10/13/98	D
1,1-DICHLOROETHENE	0.200	10/13/98	F
1,1-DICHLOROETHENE	0.200	10/13/98	FB
1,1-DICHLOROETHENE	0.200	10/16/98	A
1,1-DICHLOROETHENE	0.200	10/16/98	B
1,1-DICHLOROETHENE	0.200	10/16/98	C
1,1-DICHLOROETHENE	0.200	10/16/98	D
1,1-DICHLOROETHENE	0.200	10/16/98	E
1,1-DICHLOROETHENE	0.200	10/16/98	F
1,1-DICHLOROETHENE	0.200	10/16/98	FB
1,1-DICHLOROETHENE	0.200	10/19/98	A
1,1-DICHLOROETHENE	0.200	10/19/98	B
1,1-DICHLOROETHENE	0.200	10/19/98	C
1,1-DICHLOROETHENE	0.200	10/19/98	D
1,1-DICHLOROETHENE	0.200	10/19/98	E
1,1-DICHLOROETHENE	0.200	10/19/98	F
1,1-DICHLOROETHENE	0.200	10/22/98	A
1,1-DICHLOROETHENE	0.200	10/22/98	B
1,1-DICHLOROETHENE	0.200	10/22/98	C
1,1-DICHLOROETHENE	0.200	10/22/98	D
1,1-DICHLOROETHENE	0.200	10/22/98	F
1,1-DICHLOROETHENE	0.200	10/22/98	FB
1,1-DICHLOROETHENE	0.200	10/25/98	A
1,1-DICHLOROETHENE	0.200	10/25/98	B
1,1-DICHLOROETHENE	0.200	10/25/98	D

Summary of Laboratory Analytical Results
Volatile Organic Compounds
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Result	Date Sampled	Station
1,1-DICHLOROETHENE	0.200	10/25/98	E
1,1-DICHLOROETHENE	0.200	10/25/98	F
1,1-DICHLOROETHENE	0.200	10/25/98	FB
1,1-DICHLOROETHENE	0.200	10/31/98	A
1,1-DICHLOROETHENE	0.200	10/31/98	B
1,1-DICHLOROETHENE	0.200	10/31/98	C
1,1-DICHLOROETHENE	0.200	10/31/98	D
1,1-DICHLOROETHENE	0.200	10/31/98	F
1,1-DICHLOROETHENE	0.200	10/31/98	FB
1,1-DICHLOROETHENE	0.200	11/3/98	A
1,1-DICHLOROETHENE	0.200	11/3/98	B
1,1-DICHLOROETHENE	0.200	11/3/98	C
1,1-DICHLOROETHENE	0.200	11/3/98	D
1,1-DICHLOROETHENE	0.200	11/3/98	F
1,1-DICHLOROETHENE	0.200	11/3/98	FB
1,1-DICHLOROETHENE	0.200	11/6/98	A
1,1-DICHLOROETHENE	0.200	11/6/98	B
1,1-DICHLOROETHENE	0.200	11/6/98	C
1,1-DICHLOROETHENE	0.200	11/6/98	D
1,1-DICHLOROETHENE	0.200	11/6/98	E
1,1-DICHLOROETHENE	0.200	11/6/98	F
1,1-DICHLOROETHENE	0.200	11/9/98	A
1,1-DICHLOROETHENE	0.200	11/9/98	B
1,1-DICHLOROETHENE	0.200	11/9/98	C
1,1-DICHLOROETHENE	0.200	11/9/98	D
1,1-DICHLOROETHENE	0.200	11/9/98	E
1,1-DICHLOROETHENE	0.200	11/9/98	F

Summary of Laboratory Analytical Results
Volatile Organic Compounds
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Result	Date Sampled	Station
1,1-DICHLOROETHENE	0.200	11/9/98	FB
1,1-DICHLOROETHENE	0.200	11/12/98	A
1,1-DICHLOROETHENE	0.200	11/12/98	B
1,1-DICHLOROETHENE	0.200	11/12/98	C
1,1-DICHLOROETHENE	0.200	11/12/98	D
1,1-DICHLOROETHENE	0.200	11/12/98	E
1,1-DICHLOROETHENE	0.200	11/12/98	F
1,1-DICHLOROETHENE	0.200	11/12/98	FB
1,1-DICHLOROETHENE	0.200	11/15/98	A
1,1-DICHLOROETHENE	0.200	11/15/98	B
1,1-DICHLOROETHENE	0.200	11/15/98	C
1,1-DICHLOROETHENE	0.200	11/15/98	D
1,1-DICHLOROETHENE	0.200	11/15/98	E
1,1-DICHLOROETHENE	0.200	11/15/98	F
1,1-DICHLOROETHENE	0.200	11/18/98	A
1,1-DICHLOROETHENE	0.200	11/18/98	B
1,1-DICHLOROETHENE	0.200	11/18/98	C
1,1-DICHLOROETHENE	0.200	11/18/98	D
1,1-DICHLOROETHENE	0.200	11/18/98	E
1,1-DICHLOROETHENE	0.200	11/18/98	F
1,1-DICHLOROETHENE	0.200	11/18/98	FB
1,1-DICHLOROETHENE	0.200	11/21/98	A
1,1-DICHLOROETHENE	0.200	11/21/98	B
1,1-DICHLOROETHENE	0.200	11/21/98	C
1,1-DICHLOROETHENE	0.200	11/21/98	D
1,1-DICHLOROETHENE	0.200	11/21/98	E
1,1-DICHLOROETHENE	0.200	11/21/98	F

Summary of Laboratory Analytical Results
Volatile Organic Compounds
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Result	Date Sampled	Station
1,1-DICHLOROETHENE	0.200	11/21/98	FB
1,1-DICHLOROETHENE	0.200	11/30/98	A
1,1-DICHLOROETHENE	0.200	11/30/98	B
1,1-DICHLOROETHENE	0.200	11/30/98	C
1,1-DICHLOROETHENE	0.200	11/30/98	D
1,1-DICHLOROETHENE	0.200	11/30/98	E
1,1-DICHLOROETHENE	0.200	11/30/98	F
1,1-DICHLOROETHENE	0.200	12/3/98	A
1,1-DICHLOROETHENE	0.200	12/3/98	B
1,1-DICHLOROETHENE	0.200	12/3/98	C
1,1-DICHLOROETHENE	0.200	12/3/98	D
1,1-DICHLOROETHENE	0.200	12/3/98	F
1,1-DICHLOROETHENE	0.200	12/6/98	A
1,1-DICHLOROETHENE	0.200	12/6/98	B
1,1-DICHLOROETHENE	0.200	12/6/98	C
1,1-DICHLOROETHENE	0.200	12/6/98	D
1,1-DICHLOROETHENE	0.200	12/6/98	F
1,1-DICHLOROETHENE	0.200	12/9/98	A
1,1-DICHLOROETHENE	0.200	12/9/98	B
1,1-DICHLOROETHENE	0.200	12/9/98	C
1,1-DICHLOROETHENE	0.200	12/9/98	D
1,1-DICHLOROETHENE	0.200	12/9/98	F
1,1-DICHLOROETHENE	0.200	12/12/98	A
1,1-DICHLOROETHENE	0.200	12/12/98	B
1,1-DICHLOROETHENE	0.200	12/12/98	C
1,1-DICHLOROETHENE	0.200	12/12/98	D
1,1-DICHLOROETHENE	0.200	12/12/98	E

Summary of Laboratory Analytical Results
Volatile Organic Compounds
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Result	Date Sampled	Station
1,1-DICHLOROETHENE	0.200	12/12/98	F
1,1-DICHLOROETHENE	0.200	12/12/98	FB
1,1-DICHLOROETHENE	0.200	12/15/98	A
1,1-DICHLOROETHENE	0.200	12/15/98	B
1,1-DICHLOROETHENE	0.200	12/15/98	C
1,1-DICHLOROETHENE	0.200	12/15/98	D
1,1-DICHLOROETHENE	0.200	12/15/98	E
1,1-DICHLOROETHENE	0.200	12/15/98	F
1,1-DICHLOROETHENE	0.200	12/18/98	A
1,1-DICHLOROETHENE	0.200	12/18/98	B
1,1-DICHLOROETHENE	0.200	12/18/98	C
1,1-DICHLOROETHENE	0.200	12/18/98	D
1,1-DICHLOROETHENE	0.200	12/18/98	F
1,1-DICHLOROETHENE	0.200	12/18/98	FB
1,1-DICHLOROETHENE	0.200	12/21/98	A
1,1-DICHLOROETHENE	0.200	12/21/98	B
1,1-DICHLOROETHENE	0.200	12/21/98	C
1,1-DICHLOROETHENE	0.200	12/21/98	D
1,1-DICHLOROETHENE	0.200	12/21/98	E
1,1-DICHLOROETHENE	0.200	12/21/98	F
1,1-DICHLOROETHENE	0.200	12/21/98	FB
1,1-DICHLOROETHENE	0.200	12/27/98	A
1,1-DICHLOROETHENE	0.200	12/27/98	B
1,1-DICHLOROETHENE	0.200	12/27/98	C
1,1-DICHLOROETHENE	0.200	12/27/98	D
1,1-DICHLOROETHENE	0.200	12/27/98	F
1,1-DICHLOROETHENE	0.200	12/30/98	A

Summary of Laboratory Analytical Results
Volatile Organic Compounds
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Result	Date Sampled	Station
1,1-DICHLOROETHENE	0.200	12/30/98	B
1,1-DICHLOROETHENE	0.200	12/30/98	C
1,1-DICHLOROETHENE	0.200	12/30/98	D
1,1-DICHLOROETHENE	0.200	12/30/98	F
1,1-DICHLOROETHENE	0.200	12/30/98	FB
1,2-DICHLOROETHANE	0.200	10/1/98	A
1,2-DICHLOROETHANE	0.200	10/1/98	B
1,2-DICHLOROETHANE	0.200	10/1/98	C
1,2-DICHLOROETHANE	0.200	10/1/98	D
1,2-DICHLOROETHANE	0.200	10/1/98	E
1,2-DICHLOROETHANE	0.200	10/1/98	F
1,2-DICHLOROETHANE	0.200	10/1/98	FB
1,2-DICHLOROETHANE	0.200	10/4/98	A
1,2-DICHLOROETHANE	0.200	10/4/98	B
1,2-DICHLOROETHANE	0.200	10/4/98	C
1,2-DICHLOROETHANE	0.200	10/4/98	D
1,2-DICHLOROETHANE	0.200	10/4/98	F
1,2-DICHLOROETHANE	0.200	10/4/98	FB
1,2-DICHLOROETHANE	0.200	10/7/98	A
1,2-DICHLOROETHANE	0.200	10/7/98	B
1,2-DICHLOROETHANE	0.200	10/7/98	C
1,2-DICHLOROETHANE	0.200	10/7/98	D
1,2-DICHLOROETHANE	0.200	10/7/98	E
1,2-DICHLOROETHANE	0.200	10/7/98	F
1,2-DICHLOROETHANE	0.200	10/7/98	FB
1,2-DICHLOROETHANE	0.200	10/10/98	A
1,2-DICHLOROETHANE	0.200	10/10/98	B

Summary of Laboratory Analytical Results
Volatile Organic Compounds
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Result	Date Sampled	Station
1,2-DICHLOROETHANE	0.200	10/10/98	C
1,2-DICHLOROETHANE	0.200	10/10/98	D
1,2-DICHLOROETHANE	0.200	10/10/98	E
1,2-DICHLOROETHANE	0.200	10/10/98	F
1,2-DICHLOROETHANE	0.200	10/13/98	A
1,2-DICHLOROETHANE	0.200	10/13/98	B
1,2-DICHLOROETHANE	0.200	10/13/98	C
1,2-DICHLOROETHANE	0.200	10/13/98	D
1,2-DICHLOROETHANE	0.200	10/13/98	F
1,2-DICHLOROETHANE	0.200	10/13/98	FB
1,2-DICHLOROETHANE	0.200	10/16/98	A
1,2-DICHLOROETHANE	0.200	10/16/98	B
1,2-DICHLOROETHANE	0.200	10/16/98	C
1,2-DICHLOROETHANE	0.200	10/16/98	D
1,2-DICHLOROETHANE	0.200	10/16/98	E
1,2-DICHLOROETHANE	0.200	10/16/98	F
1,2-DICHLOROETHANE	0.200	10/16/98	FB
1,2-DICHLOROETHANE	0.200	10/19/98	A
1,2-DICHLOROETHANE	0.200	10/19/98	B
1,2-DICHLOROETHANE	0.200	10/19/98	C
1,2-DICHLOROETHANE	0.200	10/19/98	D
1,2-DICHLOROETHANE	0.200	10/19/98	E
1,2-DICHLOROETHANE	0.200	10/19/98	F
1,2-DICHLOROETHANE	0.200	10/22/98	A
1,2-DICHLOROETHANE	0.200	10/22/98	B
1,2-DICHLOROETHANE	0.200	10/22/98	C
1,2-DICHLOROETHANE	0.200	10/22/98	D

Summary of Laboratory Analytical Results
Volatile Organic Compounds
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Result	Date Sampled	Station
1,2-DICHLOROETHANE	0.200	10/22/98	F
1,2-DICHLOROETHANE	0.200	10/22/98	FB
1,2-DICHLOROETHANE	0.200	10/25/98	A
1,2-DICHLOROETHANE	0.200	10/25/98	B
1,2-DICHLOROETHANE	0.200	10/25/98	D
1,2-DICHLOROETHANE	0.200	10/25/98	E
1,2-DICHLOROETHANE	0.200	10/25/98	F
1,2-DICHLOROETHANE	0.200	10/25/98	FB
1,2-DICHLOROETHANE	0.200	10/31/98	A
1,2-DICHLOROETHANE	0.200	10/31/98	B
1,2-DICHLOROETHANE	0.200	10/31/98	C
1,2-DICHLOROETHANE	0.200	10/31/98	D
1,2-DICHLOROETHANE	0.200	10/31/98	F
1,2-DICHLOROETHANE	0.200	10/31/98	FB
1,2-DICHLOROETHANE	0.200	11/3/98	A
1,2-DICHLOROETHANE	0.200	11/3/98	B
1,2-DICHLOROETHANE	0.200	11/3/98	C
1,2-DICHLOROETHANE	0.200	11/3/98	D
1,2-DICHLOROETHANE	0.200	11/3/98	F
1,2-DICHLOROETHANE	0.200	11/3/98	FB
1,2-DICHLOROETHANE	0.200	11/6/98	A
1,2-DICHLOROETHANE	0.200	11/6/98	B
1,2-DICHLOROETHANE	0.200	11/6/98	C
1,2-DICHLOROETHANE	0.200	11/6/98	D
1,2-DICHLOROETHANE	0.200	11/6/98	E
1,2-DICHLOROETHANE	0.200	11/6/98	F
1,2-DICHLOROETHANE	0.200	11/9/98	A

Summary of Laboratory Analytical Results
Volatile Organic Compounds
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Result	Date Sampled	Station
1,2-DICHLOROETHANE	0.200	11/9/98	B
1,2-DICHLOROETHANE	0.200	11/9/98	C
1,2-DICHLOROETHANE	0.200	11/9/98	D
1,2-DICHLOROETHANE	0.200	11/9/98	E
1,2-DICHLOROETHANE	0.200	11/9/98	F
1,2-DICHLOROETHANE	0.200	11/9/98	FB
1,2-DICHLOROETHANE	0.200	11/12/98	A
1,2-DICHLOROETHANE	0.200	11/12/98	B
1,2-DICHLOROETHANE	0.200	11/12/98	C
1,2-DICHLOROETHANE	0.200	11/12/98	D
1,2-DICHLOROETHANE	0.200	11/12/98	E
1,2-DICHLOROETHANE	0.200	11/12/98	F
1,2-DICHLOROETHANE	0.200	11/12/98	FB
1,2-DICHLOROETHANE	0.200	11/15/98	A
1,2-DICHLOROETHANE	0.200	11/15/98	B
1,2-DICHLOROETHANE	0.200	11/15/98	C
1,2-DICHLOROETHANE	0.200	11/15/98	D
1,2-DICHLOROETHANE	0.200	11/15/98	E
1,2-DICHLOROETHANE	0.200	11/15/98	F
1,2-DICHLOROETHANE	0.200	11/18/98	A
1,2-DICHLOROETHANE	0.200	11/18/98	B
1,2-DICHLOROETHANE	0.200	11/18/98	C
1,2-DICHLOROETHANE	0.200	11/18/98	D
1,2-DICHLOROETHANE	0.200	11/18/98	E
1,2-DICHLOROETHANE	0.200	11/18/98	F
1,2-DICHLOROETHANE	0.200	11/18/98	FB
1,2-DICHLOROETHANE	0.200	11/21/98	A

Summary of Laboratory Analytical Results
Volatile Organic Compounds
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Result	Date Sampled	Station
1,2-DICHLOROETHANE	0.200	11/21/98	B
1,2-DICHLOROETHANE	0.200	11/21/98	C
1,2-DICHLOROETHANE	0.200	11/21/98	D
1,2-DICHLOROETHANE	0.200	11/21/98	E
1,2-DICHLOROETHANE	0.200	11/21/98	F
1,2-DICHLOROETHANE	0.200	11/21/98	FB
1,2-DICHLOROETHANE	0.200	11/30/98	A
1,2-DICHLOROETHANE	0.200	11/30/98	B
1,2-DICHLOROETHANE	0.200	11/30/98	C
1,2-DICHLOROETHANE	0.200	11/30/98	D
1,2-DICHLOROETHANE	0.200	11/30/98	E
1,2-DICHLOROETHANE	0.200	11/30/98	F
1,2-DICHLOROETHANE	0.200	12/3/98	A
1,2-DICHLOROETHANE	0.200	12/3/98	B
1,2-DICHLOROETHANE	0.200	12/3/98	C
1,2-DICHLOROETHANE	0.200	12/3/98	D
1,2-DICHLOROETHANE	0.200	12/3/98	F
1,2-DICHLOROETHANE	0.200	12/6/98	A
1,2-DICHLOROETHANE	0.200	12/6/98	B
1,2-DICHLOROETHANE	0.200	12/6/98	C
1,2-DICHLOROETHANE	0.200	12/6/98	D
1,2-DICHLOROETHANE	0.200	12/6/98	F
1,2-DICHLOROETHANE	0.200	12/9/98	A
1,2-DICHLOROETHANE	0.200	12/9/98	B
1,2-DICHLOROETHANE	1.050	12/9/98	C
1,2-DICHLOROETHANE	0.200	12/9/98	D
1,2-DICHLOROETHANE	0.200	12/9/98	F

Summary of Laboratory Analytical Results
Volatile Organic Compounds
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Result	Date Sampled	Station
1,2-DICHLOROETHANE	0.200	12/12/98	A
1,2-DICHLOROETHANE	0.200	12/12/98	B
1,2-DICHLOROETHANE	0.200	12/12/98	C
1,2-DICHLOROETHANE	0.200	12/12/98	D
1,2-DICHLOROETHANE	0.200	12/12/98	E
1,2-DICHLOROETHANE	0.200	12/12/98	F
1,2-DICHLOROETHANE	0.200	12/12/98	FB
1,2-DICHLOROETHANE	0.200	12/15/98	A
1,2-DICHLOROETHANE	0.200	12/15/98	B
1,2-DICHLOROETHANE	0.200	12/15/98	C
1,2-DICHLOROETHANE	0.200	12/15/98	D
1,2-DICHLOROETHANE	0.200	12/15/98	E
1,2-DICHLOROETHANE	0.200	12/15/98	F
1,2-DICHLOROETHANE	0.200	12/18/98	A
1,2-DICHLOROETHANE	0.200	12/18/98	B
1,2-DICHLOROETHANE	0.200	12/18/98	C
1,2-DICHLOROETHANE	0.200	12/18/98	D
1,2-DICHLOROETHANE	0.200	12/18/98	F
1,2-DICHLOROETHANE	0.200	12/18/98	FB
1,2-DICHLOROETHANE	0.200	12/21/98	A
1,2-DICHLOROETHANE	0.200	12/21/98	B
1,2-DICHLOROETHANE	0.200	12/21/98	C
1,2-DICHLOROETHANE	0.200	12/21/98	D
1,2-DICHLOROETHANE	0.200	12/21/98	E
1,2-DICHLOROETHANE	0.200	12/21/98	F
1,2-DICHLOROETHANE	0.200	12/21/98	FB
1,2-DICHLOROETHANE	0.200	12/27/98	A

Summary of Laboratory Analytical Results
Volatile Organic Compounds
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Result	Date Sampled	Station
1,2-DICHLOROETHANE	0.200	12/27/98	B
1,2-DICHLOROETHANE	0.200	12/27/98	C
1,2-DICHLOROETHANE	0.200	12/27/98	D
1,2-DICHLOROETHANE	0.200	12/27/98	F
1,2-DICHLOROETHANE	0.200	12/30/98	A
1,2-DICHLOROETHANE	0.200	12/30/98	B
1,2-DICHLOROETHANE	0.200	12/30/98	C
1,2-DICHLOROETHANE	0.200	12/30/98	D
1,2-DICHLOROETHANE	0.200	12/30/98	F
1,2-DICHLOROETHANE	0.200	12/30/98	FB
BENZENE	0.800	10/1/98	A
BENZENE	0.640	10/1/98	B
BENZENE	0.830	10/1/98	C
BENZENE	0.540	10/1/98	D
BENZENE	1.180	10/1/98	E
BENZENE	1.210	10/1/98	F
BENZENE	0.150	10/1/98	FB
BENZENE	2.330	10/4/98	A
BENZENE	2.940	10/4/98	B
BENZENE	3.260	10/4/98	C
BENZENE	3.000	10/4/98	D
BENZENE	2.720	10/4/98	F
BENZENE	0.150	10/4/98	FB
BENZENE	0.960	10/7/98	A
BENZENE	0.670	10/7/98	B
BENZENE	1.150	10/7/98	C
BENZENE	0.480	10/7/98	D

Summary of Laboratory Analytical Results
Volatile Organic Compounds
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Result	Date Sampled	Station
BENZENE	0.700	10/7/98	E
BENZENE	0.800	10/7/98	F
BENZENE	0.150	10/7/98	FB
BENZENE	1.470	10/10/98	A
BENZENE	1.340	10/10/98	B
BENZENE	1.470	10/10/98	C
BENZENE	1.180	10/10/98	D
BENZENE	1.310	10/10/98	E
BENZENE	1.500	10/10/98	F
BENZENE	1.370	10/13/98	A
BENZENE	1.310	10/13/98	B
BENZENE	1.630	10/13/98	C
BENZENE	1.310	10/13/98	D
BENZENE	1.210	10/13/98	F
BENZENE	0.150	10/13/98	FB
BENZENE	1.410	10/16/98	A
BENZENE	1.250	10/16/98	B
BENZENE	1.250	10/16/98	C
BENZENE	1.280	10/16/98	D
BENZENE	1.210	10/16/98	E
BENZENE	1.210	10/16/98	F
BENZENE	0.150	10/16/98	FB
BENZENE	3.550	10/19/98	A
BENZENE	3.450	10/19/98	B
BENZENE	3.420	10/19/98	C
BENZENE	3.230	10/19/98	D
BENZENE	3.160	10/19/98	E

Summary of Laboratory Analytical Results
Volatile Organic Compounds
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Result	Date Sampled	Station
BENZENE	3.550	10/19/98	F
BENZENE	1.530	10/22/98	A
BENZENE	1.340	10/22/98	B
BENZENE	1.500	10/22/98	C
BENZENE	1.250	10/22/98	D
BENZENE	1.280	10/22/98	F
BENZENE	0.150	10/22/98	FB
BENZENE	1.630	10/25/98	A
BENZENE	2.140	10/25/98	B
BENZENE	2.360	10/25/98	D
BENZENE	2.140	10/25/98	E
BENZENE	2.200	10/25/98	F
BENZENE	0.150	10/25/98	FB
BENZENE	2.620	10/31/98	A
BENZENE	2.490	10/31/98	B
BENZENE	2.750	10/31/98	C
BENZENE	2.080	10/31/98	D
BENZENE	2.200	10/31/98	F
BENZENE	0.150	10/31/98	FB
BENZENE	1.790	11/3/98	A
BENZENE	1.820	11/3/98	B
BENZENE	2.010	11/3/98	C
BENZENE	1.730	11/3/98	D
BENZENE	1.500	11/3/98	F
BENZENE	0.150	11/3/98	FB
BENZENE	1.050	11/6/98	A
BENZENE	0.890	11/6/98	B

Summary of Laboratory Analytical Results
Volatile Organic Compounds
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Result	Date Sampled	Station
BENZENE	1.050	11/6/98	C
BENZENE	1.600	11/6/98	D
BENZENE	0.990	11/6/98	E
BENZENE	0.830	11/6/98	F
BENZENE	2.040	11/9/98	A
BENZENE	1.980	11/9/98	B
BENZENE	2.270	11/9/98	C
BENZENE	1.760	11/9/98	D
BENZENE	2.140	11/9/98	E
BENZENE	1.980	11/9/98	F
BENZENE	0.150	11/9/98	FB
BENZENE	3.550	11/12/98	A
BENZENE	3.550	11/12/98	B
BENZENE	3.510	11/12/98	C
BENZENE	2.680	11/12/98	D
BENZENE	2.880	11/12/98	E
BENZENE	2.940	11/12/98	F
BENZENE	0.150	11/12/98	FB
BENZENE	1.850	11/15/98	A
BENZENE	1.880	11/15/98	B
BENZENE	2.170	11/15/98	C
BENZENE	1.820	11/15/98	D
BENZENE	1.790	11/15/98	E
BENZENE	1.820	11/15/98	F
BENZENE	2.880	11/18/98	A
BENZENE	2.840	11/18/98	B
BENZENE	2.680	11/18/98	C

Summary of Laboratory Analytical Results
Volatile Organic Compounds
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Result	Date Sampled	Station
BENZENE	2.270	11/18/98	D
BENZENE	0.960	11/18/98	E
BENZENE	2.650	11/18/98	F
BENZENE	0.150	11/18/98	FB
BENZENE	1.020	11/21/98	A
BENZENE	0.990	11/21/98	B
BENZENE	1.020	11/21/98	C
BENZENE	0.800	11/21/98	D
BENZENE	0.990	11/21/98	E
BENZENE	0.960	11/21/98	F
BENZENE	0.150	11/21/98	FB
BENZENE	1.470	11/30/98	A
BENZENE	1.250	11/30/98	B
BENZENE	1.470	11/30/98	C
BENZENE	1.050	11/30/98	D
BENZENE	0.990	11/30/98	E
BENZENE	1.150	11/30/98	F
BENZENE	2.010	12/3/98	A
BENZENE	1.820	12/3/98	B
BENZENE	1.630	12/3/98	C
BENZENE	1.950	12/3/98	D
BENZENE	1.850	12/3/98	F
BENZENE	2.840	12/6/98	A
BENZENE	2.560	12/6/98	B
BENZENE	5.270	12/6/98	C
BENZENE	2.300	12/6/98	D
BENZENE	2.430	12/6/98	F

Summary of Laboratory Analytical Results
Volatile Organic Compounds
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Result	Date Sampled	Station
BENZENE	2.430	12/9/98	A
BENZENE	2.240	12/9/98	B
BENZENE	3.450	12/9/98	C
BENZENE	1.920	12/9/98	D
BENZENE	2.140	12/9/98	F
BENZENE	3.160	12/12/98	A
BENZENE	3.350	12/12/98	B
BENZENE	2.840	12/12/98	C
BENZENE	3.070	12/12/98	D
BENZENE	3.190	12/12/98	E
BENZENE	2.970	12/12/98	F
BENZENE	0.150	12/12/98	FB
BENZENE	2.910	12/15/98	A
BENZENE	2.910	12/15/98	B
BENZENE	2.560	12/15/98	C
BENZENE	2.680	12/15/98	D
BENZENE	2.520	12/15/98	E
BENZENE	2.650	12/15/98	F
BENZENE	1.760	12/18/98	A
BENZENE	1.500	12/18/98	B
BENZENE	1.440	12/18/98	C
BENZENE	1.310	12/18/98	D
BENZENE	1.250	12/18/98	F
BENZENE	0.150	12/18/98	FB
BENZENE	2.620	12/21/98	A
BENZENE	2.490	12/21/98	B
BENZENE	2.780	12/21/98	C

Summary of Laboratory Analytical Results
Volatile Organic Compounds
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Result	Date Sampled	Station
BENZENE	2.080	12/21/98	D
BENZENE	1.920	12/21/98	E
BENZENE	2.300	12/21/98	F
BENZENE	0.150	12/21/98	FB
BENZENE	3.480	12/27/98	A
BENZENE	3.230	12/27/98	B
BENZENE	1.760	12/27/98	C
BENZENE	3.260	12/27/98	D
BENZENE	3.230	12/27/98	F
BENZENE	2.720	12/30/98	A
BENZENE	2.620	12/30/98	B
BENZENE	1.920	12/30/98	C
BENZENE	1.760	12/30/98	D
BENZENE	1.440	12/30/98	F
BENZENE	0.150	12/30/98	FB
TETRACHLOROETHENE	0.350	10/1/98	A
TETRACHLOROETHENE	0.350	10/1/98	B
TETRACHLOROETHENE	0.350	10/1/98	C
TETRACHLOROETHENE	0.350	10/1/98	D
TETRACHLOROETHENE	0.350	10/1/98	E
TETRACHLOROETHENE	0.350	10/1/98	F
TETRACHLOROETHENE	0.350	10/1/98	FB
TETRACHLOROETHENE	0.350	10/4/98	A
TETRACHLOROETHENE	0.350	10/4/98	B
TETRACHLOROETHENE	0.350	10/4/98	C
TETRACHLOROETHENE	0.350	10/4/98	D
TETRACHLOROETHENE	0.350	10/4/98	F

Summary of Laboratory Analytical Results
Volatile Organic Compounds
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Result	Date Sampled	Station
TETRACHLOROETHENE	0.350	10/4/98	FB
TETRACHLOROETHENE	0.350	10/7/98	A
TETRACHLOROETHENE	0.350	10/7/98	B
TETRACHLOROETHENE	0.350	10/7/98	C
TETRACHLOROETHENE	0.350	10/7/98	D
TETRACHLOROETHENE	0.350	10/7/98	E
TETRACHLOROETHENE	0.350	10/7/98	F
TETRACHLOROETHENE	0.350	10/7/98	FB
TETRACHLOROETHENE	0.350	10/10/98	A
TETRACHLOROETHENE	0.350	10/10/98	B
TETRACHLOROETHENE	0.350	10/10/98	C
TETRACHLOROETHENE	0.350	10/10/98	D
TETRACHLOROETHENE	0.350	10/10/98	E
TETRACHLOROETHENE	0.350	10/10/98	F
TETRACHLOROETHENE	0.350	10/13/98	A
TETRACHLOROETHENE	0.350	10/13/98	B
TETRACHLOROETHENE	0.350	10/13/98	C
TETRACHLOROETHENE	0.350	10/13/98	D
TETRACHLOROETHENE	0.350	10/13/98	F
TETRACHLOROETHENE	0.350	10/13/98	FB
TETRACHLOROETHENE	0.350	10/16/98	A
TETRACHLOROETHENE	0.350	10/16/98	B
TETRACHLOROETHENE	0.350	10/16/98	C
TETRACHLOROETHENE	0.350	10/16/98	D
TETRACHLOROETHENE	0.350	10/16/98	E
TETRACHLOROETHENE	0.350	10/16/98	F
TETRACHLOROETHENE	0.350	10/16/98	FB

Summary of Laboratory Analytical Results
Volatile Organic Compounds
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Result	Date Sampled	Station
TETRACHLOROETHENE	1.090	10/19/98	A
TETRACHLOROETHENE	0.950	10/19/98	B
TETRACHLOROETHENE	0.950	10/19/98	C
TETRACHLOROETHENE	1.290	10/19/98	D
TETRACHLOROETHENE	0.950	10/19/98	E
TETRACHLOROETHENE	1.220	10/19/98	F
TETRACHLOROETHENE	0.350	10/22/98	A
TETRACHLOROETHENE	0.350	10/22/98	B
TETRACHLOROETHENE	0.350	10/22/98	C
TETRACHLOROETHENE	0.350	10/22/98	D
TETRACHLOROETHENE	0.350	10/22/98	F
TETRACHLOROETHENE	0.350	10/22/98	FB
TETRACHLOROETHENE	0.350	10/25/98	A
TETRACHLOROETHENE	0.350	10/25/98	B
TETRACHLOROETHENE	0.350	10/25/98	D
TETRACHLOROETHENE	0.350	10/25/98	E
TETRACHLOROETHENE	0.350	10/25/98	F
TETRACHLOROETHENE	0.350	10/25/98	FB
TETRACHLOROETHENE	0.350	10/31/98	A
TETRACHLOROETHENE	0.350	10/31/98	B
TETRACHLOROETHENE	0.350	10/31/98	C
TETRACHLOROETHENE	0.350	10/31/98	D
TETRACHLOROETHENE	0.350	10/31/98	F
TETRACHLOROETHENE	0.350	10/31/98	FB
TETRACHLOROETHENE	0.350	11/3/98	A
TETRACHLOROETHENE	0.350	11/3/98	B
TETRACHLOROETHENE	0.350	11/3/98	C

Summary of Laboratory Analytical Results
Volatile Organic Compounds
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Result	Date Sampled	Station
TETRACHLOROETHENE	0.350	11/3/98	D
TETRACHLOROETHENE	0.350	11/3/98	F
TETRACHLOROETHENE	0.350	11/3/98	FB
TETRACHLOROETHENE	0.350	11/6/98	A
TETRACHLOROETHENE	0.350	11/6/98	B
TETRACHLOROETHENE	0.350	11/6/98	C
TETRACHLOROETHENE	0.350	11/6/98	D
TETRACHLOROETHENE	0.350	11/6/98	E
TETRACHLOROETHENE	0.350	11/6/98	F
TETRACHLOROETHENE	0.350	11/9/98	A
TETRACHLOROETHENE	0.350	11/9/98	B
TETRACHLOROETHENE	0.350	11/9/98	C
TETRACHLOROETHENE	0.350	11/9/98	D
TETRACHLOROETHENE	0.350	11/9/98	E
TETRACHLOROETHENE	0.350	11/9/98	F
TETRACHLOROETHENE	0.350	11/9/98	FB
TETRACHLOROETHENE	0.350	11/12/98	A
TETRACHLOROETHENE	0.350	11/12/98	B
TETRACHLOROETHENE	0.350	11/12/98	C
TETRACHLOROETHENE	0.350	11/12/98	D
TETRACHLOROETHENE	0.350	11/12/98	E
TETRACHLOROETHENE	0.350	11/12/98	F
TETRACHLOROETHENE	0.350	11/12/98	FB
TETRACHLOROETHENE	0.350	11/15/98	A
TETRACHLOROETHENE	0.350	11/15/98	B
TETRACHLOROETHENE	0.350	11/15/98	C
TETRACHLOROETHENE	0.350	11/15/98	D

Summary of Laboratory Analytical Results
Volatile Organic Compounds
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Result	Date Sampled	Station
TETRACHLOROETHENE	0.350	11/15/98	E
TETRACHLOROETHENE	0.350	11/15/98	F
TETRACHLOROETHENE	1.900	11/18/98	A
TETRACHLOROETHENE	0.350	11/18/98	B
TETRACHLOROETHENE	0.350	11/18/98	C
TETRACHLOROETHENE	0.350	11/18/98	D
TETRACHLOROETHENE	0.350	11/18/98	E
TETRACHLOROETHENE	0.350	11/18/98	F
TETRACHLOROETHENE	0.350	11/18/98	FB
TETRACHLOROETHENE	0.350	11/21/98	A
TETRACHLOROETHENE	0.350	11/21/98	B
TETRACHLOROETHENE	0.350	11/21/98	C
TETRACHLOROETHENE	0.350	11/21/98	D
TETRACHLOROETHENE	0.350	11/21/98	E
TETRACHLOROETHENE	0.350	11/21/98	F
TETRACHLOROETHENE	0.350	11/21/98	FB
TETRACHLOROETHENE	0.350	11/30/98	A
TETRACHLOROETHENE	0.350	11/30/98	B
TETRACHLOROETHENE	0.350	11/30/98	C
TETRACHLOROETHENE	0.350	11/30/98	D
TETRACHLOROETHENE	0.350	11/30/98	E
TETRACHLOROETHENE	0.350	11/30/98	F
TETRACHLOROETHENE	0.350	12/3/98	A
TETRACHLOROETHENE	0.350	12/3/98	B
TETRACHLOROETHENE	0.350	12/3/98	C
TETRACHLOROETHENE	0.350	12/3/98	D
TETRACHLOROETHENE	0.350	12/3/98	F

Summary of Laboratory Analytical Results
Volatile Organic Compounds
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Result	Date Sampled	Station
TETRACHLOROETHENE	0.350	12/6/98	A
TETRACHLOROETHENE	1.360	12/6/98	B
TETRACHLOROETHENE	0.350	12/6/98	C
TETRACHLOROETHENE	0.350	12/6/98	D
TETRACHLOROETHENE	0.350	12/6/98	F
TETRACHLOROETHENE	0.350	12/9/98	A
TETRACHLOROETHENE	0.350	12/9/98	B
TETRACHLOROETHENE	0.350	12/9/98	C
TETRACHLOROETHENE	0.350	12/9/98	D
TETRACHLOROETHENE	0.350	12/9/98	F
TETRACHLOROETHENE	0.350	12/12/98	A
TETRACHLOROETHENE	0.350	12/12/98	B
TETRACHLOROETHENE	0.350	12/12/98	C
TETRACHLOROETHENE	0.350	12/12/98	D
TETRACHLOROETHENE	0.350	12/12/98	E
TETRACHLOROETHENE	6.780	12/12/98	F
TETRACHLOROETHENE	0.350	12/12/98	FB
TETRACHLOROETHENE	0.350	12/15/98	A
TETRACHLOROETHENE	0.350	12/15/98	B
TETRACHLOROETHENE	0.350	12/15/98	C
TETRACHLOROETHENE	4.000	12/15/98	D
TETRACHLOROETHENE	0.350	12/15/98	E
TETRACHLOROETHENE	1.020	12/15/98	F
TETRACHLOROETHENE	1.090	12/18/98	A
TETRACHLOROETHENE	0.350	12/18/98	B
TETRACHLOROETHENE	0.350	12/18/98	C
TETRACHLOROETHENE	0.350	12/18/98	D

Summary of Laboratory Analytical Results
Volatile Organic Compounds
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Result	Date Sampled	Station
TETRACHLOROETHENE	0.810	12/18/98	F
TETRACHLOROETHENE	0.350	12/18/98	FB
TETRACHLOROETHENE	0.350	12/21/98	A
TETRACHLOROETHENE	0.350	12/21/98	B
TETRACHLOROETHENE	0.350	12/21/98	C
TETRACHLOROETHENE	0.350	12/21/98	D
TETRACHLOROETHENE	0.750	12/21/98	E
TETRACHLOROETHENE	0.350	12/21/98	F
TETRACHLOROETHENE	0.350	12/21/98	FB
TETRACHLOROETHENE	0.350	12/27/98	A
TETRACHLOROETHENE	0.350	12/27/98	B
TETRACHLOROETHENE	0.350	12/27/98	C
TETRACHLOROETHENE	0.350	12/27/98	D
TETRACHLOROETHENE	0.350	12/27/98	F
TETRACHLOROETHENE	0.350	12/30/98	A
TETRACHLOROETHENE	0.350	12/30/98	B
TETRACHLOROETHENE	0.350	12/30/98	C
TETRACHLOROETHENE	0.350	12/30/98	D
TETRACHLOROETHENE	0.350	12/30/98	F
TETRACHLOROETHENE	0.350	12/30/98	FB
XYLENE	2.000	10/1/98	A
XYLENE	1.170	10/1/98	B
XYLENE	2.340	10/1/98	C
XYLENE	0.870	10/1/98	D
XYLENE	1.040	10/1/98	E
XYLENE	4.300	10/1/98	F
XYLENE	0.200	10/1/98	FB

Summary of Laboratory Analytical Results
Volatile Organic Compounds
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Result	Date Sampled	Station
XYLENE	9.730	10/4/98	A
XYLENE	7.210	10/4/98	B
XYLENE	7.340	10/4/98	C
XYLENE	7.210	10/4/98	D
XYLENE	6.900	10/4/98	F
XYLENE	0.200	10/4/98	FB
XYLENE	2.130	10/7/98	A
XYLENE	1.780	10/7/98	B
XYLENE	3.130	10/7/98	C
XYLENE	1.220	10/7/98	D
XYLENE	1.220	10/7/98	E
XYLENE	1.520	10/7/98	F
XYLENE	0.200	10/7/98	FB
XYLENE	3.340	10/10/98	A
XYLENE	2.820	10/10/98	B
XYLENE	3.260	10/10/98	C
XYLENE	2.340	10/10/98	D
XYLENE	2.560	10/10/98	E
XYLENE	2.520	10/10/98	F
XYLENE	3.430	10/13/98	A
XYLENE	3.170	10/13/98	B
XYLENE	4.300	10/13/98	C
XYLENE	2.690	10/13/98	D
XYLENE	2.780	10/13/98	F
XYLENE	0.200	10/13/98	FB
XYLENE	2.560	10/16/98	A
XYLENE	2.000	10/16/98	B

Summary of Laboratory Analytical Results
Volatile Organic Compounds
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Result	Date Sampled	Station
XYLENE	2.430	10/16/98	C
XYLENE	1.520	10/16/98	D
XYLENE	1.390	10/16/98	E
XYLENE	1.820	10/16/98	F
XYLENE	0.200	10/16/98	FB
XYLENE	11.640	10/19/98	A
XYLENE	11.590	10/19/98	B
XYLENE	10.030	10/19/98	C
XYLENE	10.330	10/19/98	D
XYLENE	8.770	10/19/98	E
XYLENE	10.290	10/19/98	F
XYLENE	3.730	10/22/98	A
XYLENE	2.740	10/22/98	B
XYLENE	102.900	10/22/98	C
XYLENE	2.170	10/22/98	D
XYLENE	2.300	10/22/98	F
XYLENE	0.200	10/22/98	FB
XYLENE	3.780	10/25/98	A
XYLENE	5.380	10/25/98	B
XYLENE	5.430	10/25/98	D
XYLENE	5.210	10/25/98	E
XYLENE	4.690	10/25/98	F
XYLENE	0.200	10/25/98	FB
XYLENE	6.380	10/31/98	A
XYLENE	5.730	10/31/98	B
XYLENE	7.080	10/31/98	C
XYLENE	4.730	10/31/98	D

Summary of Laboratory Analytical Results
Volatile Organic Compounds
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Result	Date Sampled	Station
XYLENE	5.510	10/31/98	F
XYLENE	0.200	10/31/98	FB
XYLENE	4.170	11/3/98	A
XYLENE	4.260	11/3/98	B
XYLENE	4.560	11/3/98	C
XYLENE	3.430	11/3/98	D
XYLENE	3.430	11/3/98	F
XYLENE	0.200	11/3/98	FB
XYLENE	2.210	11/6/98	A
XYLENE	1.740	11/6/98	B
XYLENE	2.130	11/6/98	C
XYLENE	1.870	11/6/98	D
XYLENE	1.820	11/6/98	E
XYLENE	1.430	11/6/98	F
XYLENE	5.250	11/9/98	A
XYLENE	4.520	11/9/98	B
XYLENE	5.380	11/9/98	C
XYLENE	3.860	11/9/98	D
XYLENE	6.990	11/9/98	E
XYLENE	5.210	11/9/98	F
XYLENE	0.200	11/9/98	FB
XYLENE	9.770	11/12/98	A
XYLENE	8.770	11/12/98	B
XYLENE	10.330	11/12/98	C
XYLENE	6.510	11/12/98	D
XYLENE	5.990	11/12/98	E
XYLENE	6.820	11/12/98	F

Summary of Laboratory Analytical Results
Volatile Organic Compounds
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Result	Date Sampled	Station
XYLENE	0.200	11/12/98	FB
XYLENE	7.120	11/15/98	A
XYLENE	7.730	11/15/98	B
XYLENE	8.210	11/15/98	C
XYLENE	5.340	11/15/98	D
XYLENE	4.780	11/15/98	E
XYLENE	5.820	11/15/98	F
XYLENE	7.080	11/18/98	A
XYLENE	7.550	11/18/98	B
XYLENE	7.640	11/18/98	C
XYLENE	7.600	11/18/98	D
XYLENE	1.950	11/18/98	E
XYLENE	5.690	11/18/98	F
XYLENE	0.200	11/18/98	FB
XYLENE	2.210	11/21/98	A
XYLENE	2.000	11/21/98	B
XYLENE	1.780	11/21/98	C
XYLENE	1.300	11/21/98	D
XYLENE	1.220	11/21/98	E
XYLENE	1.220	11/21/98	F
XYLENE	0.200	11/21/98	FB
XYLENE	2.910	11/30/98	A
XYLENE	2.340	11/30/98	B
XYLENE	3.260	11/30/98	C
XYLENE	1.870	11/30/98	D
XYLENE	1.650	11/30/98	E
XYLENE	2.210	11/30/98	F

Summary of Laboratory Analytical Results
Volatile Organic Compounds
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Result	Date Sampled	Station
XYLENE	4.910	12/3/98	A
XYLENE	4.340	12/3/98	B
XYLENE	4.210	12/3/98	C
XYLENE	3.470	12/3/98	D
XYLENE	4.040	12/3/98	F
XYLENE	6.560	12/6/98	A
XYLENE	6.080	12/6/98	B
XYLENE	7.420	12/6/98	C
XYLENE	4.260	12/6/98	D
XYLENE	4.560	12/6/98	F
XYLENE	6.640	12/9/98	A
XYLENE	5.380	12/9/98	B
XYLENE	9.770	12/9/98	C
XYLENE	4.260	12/9/98	D
XYLENE	5.210	12/9/98	F
XYLENE	6.210	12/12/98	A
XYLENE	6.170	12/12/98	B
XYLENE	7.080	12/12/98	C
XYLENE	4.650	12/12/98	D
XYLENE	4.820	12/12/98	E
XYLENE	5.080	12/12/98	F
XYLENE	0.200	12/12/98	FB
XYLENE	10.590	12/15/98	A
XYLENE	8.900	12/15/98	B
XYLENE	8.770	12/15/98	C
XYLENE	7.210	12/15/98	D
XYLENE	6.820	12/15/98	E

Summary of Laboratory Analytical Results
Volatile Organic Compounds
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Result	Date Sampled	Station
XYLENE	7.690	12/15/98	F
XYLENE	3.690	12/18/98	A
XYLENE	3.170	12/18/98	B
XYLENE	2.650	12/18/98	C
XYLENE	1.740	12/18/98	D
XYLENE	3.780	12/18/98	F
XYLENE	0.200	12/18/98	FB
XYLENE	5.820	12/21/98	A
XYLENE	5.080	12/21/98	B
XYLENE	6.340	12/21/98	C
XYLENE	4.390	12/21/98	D
XYLENE	4.080	12/21/98	E
XYLENE	4.780	12/21/98	F
XYLENE	0.200	12/21/98	FB
XYLENE	4.950	12/27/98	A
XYLENE	4.430	12/27/98	B
XYLENE	3.780	12/27/98	C
XYLENE	5.080	12/27/98	D
XYLENE	4.080	12/27/98	F
XYLENE	4.260	12/30/98	A
XYLENE	3.910	12/30/98	B
XYLENE	3.690	12/30/98	C
XYLENE	7.770	12/30/98	D
XYLENE	2.950	12/30/98	F
XYLENE	0.200	12/30/98	FB

APPENDIX B

SUMMARY OF LABORATORY ANALYTICAL RESULTS SEMI-VOLATILE ORGANIC COMPOUNDS

**Summary of Laboratory Analytical Results
Pesticides and Polychlorinated Biphenyls
(Measured in ug/m3)
Fourth Quarter 1998**

Compound	Result	Date Sampled	Station
4,4'-DDD	0.000	10/1/98	A
4,4'-DDD	0.000	10/1/98	B
4,4'-DDD	0.000	10/1/98	C
4,4'-DDD	0.000	10/1/98	D
4,4'-DDD	0.000	10/1/98	E
4,4'-DDD	0.000	10/1/98	F
4,4'-DDD	0.000	10/4/98	A
4,4'-DDD	0.000	10/4/98	B
4,4'-DDD	0.000	10/4/98	C
4,4'-DDD	0.000	10/4/98	D
4,4'-DDD	0.000	10/4/98	F
4,4'-DDD	0.000	10/4/98	FB
4,4'-DDD	0.000	10/7/98	A
4,4'-DDD	0.000	10/7/98	B
4,4'-DDD	0.000	10/7/98	C
4,4'-DDD	0.000	10/7/98	D
4,4'-DDD	0.000	10/7/98	E
4,4'-DDD	0.000	10/7/98	F
4,4'-DDD	0.000	10/7/98	FB
4,4'-DDD	0.000	10/10/98	A
4,4'-DDD	0.000	10/10/98	B
4,4'-DDD	0.000	10/10/98	C
4,4'-DDD	0.000	10/10/98	D
4,4'-DDD	0.000	10/10/98	E
4,4'-DDD	0.000	10/10/98	F
4,4'-DDD	0.000	10/13/98	A

Summary of Laboratory Analytical Results
Pesticides and Polychlorinated Biphenyls
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Result	Date Sampled	Station
4,4'-DDD	0.000	10/13/98	B
4,4'-DDD	0.000	10/13/98	C
4,4'-DDD	0.000	10/13/98	D
4,4'-DDD	0.000	10/13/98	F
4,4'-DDD	0.000	10/13/98	FB
4,4'-DDD	0.000	10/16/98	A
4,4'-DDD	0.000	10/16/98	B
4,4'-DDD	0.000	10/16/98	C
4,4'-DDD	0.000	10/16/98	D
4,4'-DDD	0.000	10/16/98	E
4,4'-DDD	0.000	10/16/98	F
4,4'-DDD	0.000	10/16/98	FB
4,4'-DDD	0.000	10/22/98	A
4,4'-DDD	0.000	10/22/98	B
4,4'-DDD	0.000	10/22/98	C
4,4'-DDD	0.000	10/22/98	D
4,4'-DDD	0.000	10/22/98	F
4,4'-DDD	0.000	10/22/98	FB
4,4'-DDD	0.000	10/25/98	A
4,4'-DDD	0.000	10/25/98	B
4,4'-DDD	0.000	10/25/98	C
4,4'-DDD	0.000	10/25/98	D
4,4'-DDD	0.000	10/25/98	E
4,4'-DDD	0.000	10/25/98	F
4,4'-DDD	0.000	10/25/98	EB
4,4'-DDD	0.000	10/28/98	A

**Summary of Laboratory Analytical Results
Pesticides and Polychlorinated Biphenyls
(Measured in ug/m3)
Fourth Quarter 1998**

Compound	Result	Date Sampled	Station
4,4'-DDD	0.000	10/28/98	B
4,4'-DDD	0.000	10/28/98	C
4,4'-DDD	0.000	10/28/98	D
4,4'-DDD	0.000	10/28/98	E
4,4'-DDD	0.000	10/28/98	F
4,4'-DDD	0.000	10/31/98	A
4,4'-DDD	0.000	10/31/98	B
4,4'-DDD	0.000	10/31/98	C
4,4'-DDD	0.000	10/31/98	D
4,4'-DDD	0.000	10/31/98	F
4,4'-DDD	0.000	10/31/98	FB
4,4'-DDD	0.000	11/3/98	A
4,4'-DDD	0.000	11/3/98	B
4,4'-DDD	0.000	11/3/98	C
4,4'-DDD	0.000	11/3/98	D
4,4'-DDD	0.000	11/3/98	F
4,4'-DDD	0.000	11/3/98	FB
4,4'-DDD	0.000	11/6/98	A
4,4'-DDD	0.000	11/6/98	B
4,4'-DDD	0.000	11/6/98	C
4,4'-DDD	0.000	11/6/98	D
4,4'-DDD	0.000	11/6/98	E
4,4'-DDD	0.000	11/6/98	F
4,4'-DDD	0.000	11/9/98	A
4,4'-DDD	0.000	11/9/98	B
4,4'-DDD	0.000	11/9/98	C

Summary of Laboratory Analytical Results
Pesticides and Polychlorinated Biphenyls
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Result	Date Sampled	Station
4,4'-DDD	0.000	11/9/98	D
4,4'-DDD	0.000	11/9/98	E
4,4'-DDD	0.000	11/9/98	F
4,4'-DDD	0.000	11/9/98	FB
4,4'-DDD	0.000	11/12/98	A
4,4'-DDD	0.000	11/12/98	B
4,4'-DDD	0.000	11/12/98	C
4,4'-DDD	0.000	11/12/98	D
4,4'-DDD	0.000	11/12/98	E
4,4'-DDD	0.000	11/12/98	F
4,4'-DDD	0.000	11/12/98	FB
4,4'-DDD	0.000	11/15/98	A
4,4'-DDD	0.000	11/15/98	B
4,4'-DDD	0.000	11/15/98	C
4,4'-DDD	0.000	11/15/98	D
4,4'-DDD	0.000	11/15/98	E
4,4'-DDD	0.000	11/15/98	F
4,4'-DDD	0.000	11/15/98	FB
4,4'-DDD	0.000	11/18/98	A
4,4'-DDD	0.000	11/18/98	B
4,4'-DDD	0.000	11/18/98	C
4,4'-DDD	0.000	11/18/98	D
4,4'-DDD	0.000	11/18/98	F
4,4'-DDD	0.000	11/18/98	FB
4,4'-DDD	0.000	11/21/98	A
4,4'-DDD	0.000	11/21/98	B

Summary of Laboratory Analytical Results
Pesticides and Polychlorinated Biphenyls
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Result	Date Sampled	Station
4,4'-DDD	0.000	11/21/98	C
4,4'-DDD	0.000	11/21/98	D
4,4'-DDD	0.000	11/21/98	E
4,4'-DDD	0.000	11/21/98	F
4,4'-DDD	0.000	11/21/98	FB
4,4'-DDD	0.000	11/24/98	A
4,4'-DDD	0.000	11/24/98	B
4,4'-DDD	0.000	11/24/98	C
4,4'-DDD	0.000	11/24/98	D
4,4'-DDD	0.000	11/24/98	E
4,4'-DDD	0.000	11/24/98	F
4,4'-DDD	0.000	11/27/98	A
4,4'-DDD	0.000	11/27/98	B
4,4'-DDD	0.000	11/27/98	C
4,4'-DDD	0.000	11/27/98	D
4,4'-DDD	0.000	11/27/98	F
4,4'-DDD	0.000	11/27/98	FB
4,4'-DDD	0.000	11/30/98	A
4,4'-DDD	0.000	11/30/98	B
4,4'-DDD	0.000	11/30/98	C
4,4'-DDD	0.000	11/30/98	D
4,4'-DDD	0.000	11/30/98	E
4,4'-DDD	0.000	11/30/98	F
4,4'-DDD	0.000	12/3/98	A
4,4'-DDD	0.000	12/3/98	B
4,4'-DDD	0.000	12/3/98	C

Summary of Laboratory Analytical Results
Pesticides and Polychlorinated Biphenyls
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Result	Date Sampled	Station
4,4'-DDD	0.000	12/3/98	D
4,4'-DDD	0.000	12/3/98	F
4,4'-DDD	0.000	12/6/98	A
4,4'-DDD	0.000	12/6/98	B
4,4'-DDD	0.000	12/6/98	C
4,4'-DDD	0.000	12/6/98	D
4,4'-DDD	0.000	12/6/98	F
4,4'-DDD	0.000	12/9/98	A
4,4'-DDD	0.000	12/9/98	B
4,4'-DDD	0.000	12/9/98	C
4,4'-DDD	0.000	12/9/98	D
4,4'-DDD	0.000	12/9/98	F
4,4'-DDD	0.000	12/12/98	A
4,4'-DDD	0.000	12/12/98	B
4,4'-DDD	0.000	12/12/98	C
4,4'-DDD	0.000	12/12/98	D
4,4'-DDD	0.000	12/12/98	E
4,4'-DDD	0.000	12/12/98	F
4,4'-DDD	0.000	12/12/98	FB
4,4'-DDD	0.000	12/15/98	A
4,4'-DDD	0.000	12/15/98	B
4,4'-DDD	0.000	12/15/98	C
4,4'-DDD	0.000	12/15/98	D
4,4'-DDD	0.000	12/15/98	E
4,4'-DDD	0.000	12/15/98	F
4,4'-DDD	0.000	12/18/98	A

Summary of Laboratory Analytical Results
Pesticides and Polychlorinated Biphenyls
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Result	Date Sampled	Station
4,4'-DDD	0.000	12/18/98	B
4,4'-DDD	0.000	12/18/98	C
4,4'-DDD	0.000	12/18/98	D
4,4'-DDD	0.000	12/18/98	F
4,4'-DDD	0.000	12/18/98	FB
4,4'-DDD	0.000	12/21/98	A
4,4'-DDD	0.000	12/21/98	B
4,4'-DDD	0.000	12/21/98	C
4,4'-DDD	0.000	12/21/98	D
4,4'-DDD	0.000	12/21/98	E
4,4'-DDD	0.000	12/21/98	F
4,4'-DDD	0.000	12/21/98	FB
4,4'-DDD	0.000	12/27/98	A
4,4'-DDD	0.000	12/27/98	B
4,4'-DDD	0.000	12/27/98	C
4,4'-DDD	0.000	12/27/98	D
4,4'-DDD	0.000	12/27/98	E
4,4'-DDD	0.000	12/27/98	F
4,4'-DDD	0.000	12/30/98	A
4,4'-DDD	0.000	12/30/98	B
4,4'-DDD	0.000	12/30/98	C
4,4'-DDD	0.000	12/30/98	D
4,4'-DDD	0.000	12/30/98	F
4,4'-DDD	0.000	12/30/98	FB
4,4'-DDE	0.000	10/1/98	A
4,4'-DDE	0.000	10/1/98	B

**Summary of Laboratory Analytical Results
Pesticides and Polychlorinated Biphenyls
(Measured in ug/m3)
Fourth Quarter 1998**

Compound	Result	Date Sampled	Station
4,4'-DDE	0.000	10/1/98	C
4,4'-DDE	0.000	10/1/98	D
4,4'-DDE	0.000	10/1/98	E
4,4'-DDE	0.000	10/1/98	F
4,4'-DDE	0.000	10/4/98	A
4,4'-DDE	0.000	10/4/98	B
4,4'-DDE	0.000	10/4/98	C
4,4'-DDE	0.000	10/4/98	D
4,4'-DDE	0.000	10/4/98	F
4,4'-DDE	0.000	10/4/98	FB
4,4'-DDE	0.000	10/7/98	A
4,4'-DDE	0.000	10/7/98	B
4,4'-DDE	0.000	10/7/98	C
4,4'-DDE	0.000	10/7/98	D
4,4'-DDE	0.000	10/7/98	E
4,4'-DDE	0.000	10/7/98	F
4,4'-DDE	0.000	10/7/98	FB
4,4'-DDE	0.000	10/10/98	A
4,4'-DDE	0.000	10/10/98	B
4,4'-DDE	0.000	10/10/98	C
4,4'-DDE	0.000	10/10/98	D
4,4'-DDE	0.000	10/10/98	E
4,4'-DDE	0.000	10/10/98	F
4,4'-DDE	0.000	10/13/98	A
4,4'-DDE	0.000	10/13/98	B
4,4'-DDE	0.000	10/13/98	C

**Summary of Laboratory Analytical Results
Pesticides and Polychlorinated Biphenyls
(Measured in ug/m3)
Fourth Quarter 1998**

Compound	Result	Date Sampled	Station
4,4'-DDE	0.000	10/13/98	D
4,4'-DDE	0.000	10/13/98	F
4,4'-DDE	0.000	10/13/98	FB
4,4'-DDE	0.000	10/16/98	A
4,4'-DDE	0.000	10/16/98	B
4,4'-DDE	0.000	10/16/98	C
4,4'-DDE	0.000	10/16/98	D
4,4'-DDE	0.000	10/16/98	E
4,4'-DDE	0.000	10/16/98	F
4,4'-DDE	0.000	10/16/98	FB
4,4'-DDE	0.000	10/22/98	A
4,4'-DDE	0.000	10/22/98	B
4,4'-DDE	0.000	10/22/98	C
4,4'-DDE	0.000	10/22/98	D
4,4'-DDE	0.000	10/22/98	F
4,4'-DDE	0.000	10/22/98	FB
4,4'-DDE	0.000	10/25/98	A
4,4'-DDE	0.000	10/25/98	B
4,4'-DDE	0.000	10/25/98	C
4,4'-DDE	0.000	10/25/98	D
4,4'-DDE	0.000	10/25/98	E
4,4'-DDE	0.000	10/25/98	F
4,4'-DDE	0.000	10/25/98	FB
4,4'-DDE	0.000	10/28/98	A
4,4'-DDE	0.000	10/28/98	B
4,4'-DDE	0.000	10/28/98	C

**Summary of Laboratory Analytical Results
Pesticides and Polychlorinated Biphenyls
(Measured in ug/m3)
Fourth Quarter 1998**

Compound	Result	Date Sampled	Station
4,4'-DDE	0.000	10/28/98	D
4,4'-DDE	0.000	10/28/98	E
4,4'-DDE	0.000	10/28/98	F
4,4'-DDE	0.000	10/31/98	A
4,4'-DDE	0.000	10/31/98	B
4,4'-DDE	0.000	10/31/98	C
4,4'-DDE	0.000	10/31/98	D
4,4'-DDE	0.000	10/31/98	F
4,4'-DDE	0.000	10/31/98	FB
4,4'-DDE	0.000	11/3/98	A
4,4'-DDE	0.000	11/3/98	B
4,4'-DDE	0.000	11/3/98	C
4,4'-DDE	0.000	11/3/98	D
4,4'-DDE	0.000	11/3/98	F
4,4'-DDE	0.000	11/3/98	FB
4,4'-DDE	0.000	11/6/98	A
4,4'-DDE	0.000	11/6/98	B
4,4'-DDE	0.000	11/6/98	C
4,4'-DDE	0.000	11/6/98	D
4,4'-DDE	0.000	11/6/98	E
4,4'-DDE	0.000	11/6/98	F
4,4'-DDE	0.000	11/9/98	A
4,4'-DDE	0.000	11/9/98	B
4,4'-DDE	0.000	11/9/98	C
4,4'-DDE	0.000	11/9/98	D
4,4'-DDE	0.000	11/9/98	E

Summary of Laboratory Analytical Results
Pesticides and Polychlorinated Biphenyls
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Result	Date Sampled	Station
4,4'-DDE	0.000	11/9/98	F
4,4'-DDE	0.000	11/9/98	FB
4,4'-DDE	0.000	11/12/98	A
4,4'-DDE	0.000	11/12/98	B
4,4'-DDE	0.000	11/12/98	C
4,4'-DDE	0.000	11/12/98	D
4,4'-DDE	0.000	11/12/98	E
4,4'-DDE	0.000	11/12/98	F
4,4'-DDE	0.000	11/12/98	FB
4,4'-DDE	0.000	11/15/98	A
4,4'-DDE	0.000	11/15/98	B
4,4'-DDE	0.000	11/15/98	C
4,4'-DDE	0.000	11/15/98	D
4,4'-DDE	0.000	11/15/98	E
4,4'-DDE	0.000	11/15/98	F
4,4'-DDE	0.000	11/15/98	FB
4,4'-DDE	0.000	11/18/98	A
4,4'-DDE	0.000	11/18/98	B
4,4'-DDE	0.000	11/18/98	C
4,4'-DDE	0.000	11/18/98	D
4,4'-DDE	0.000	11/18/98	F
4,4'-DDE	0.000	11/18/98	FB
4,4'-DDE	0.000	11/21/98	A
4,4'-DDE	0.000	11/21/98	B
4,4'-DDE	0.000	11/21/98	C
4,4'-DDE	0.000	11/21/98	D

**Summary of Laboratory Analytical Results
Pesticides and Polychlorinated Biphenyls
(Measured in ug/m3)
Fourth Quarter 1998**

Compound	Result	Date Sampled	Station
4,4'-DDE	0.000	11/21/98	E
4,4'-DDE	0.000	11/21/98	F
4,4'-DDE	0.000	11/21/98	FB
4,4'-DDE	0.000	11/24/98	A
4,4'-DDE	0.000	11/24/98	B
4,4'-DDE	0.000	11/24/98	C
4,4'-DDE	0.000	11/24/98	D
4,4'-DDE	0.000	11/24/98	E
4,4'-DDE	0.000	11/24/98	F
4,4'-DDE	0.000	11/27/98	A
4,4'-DDE	0.000	11/27/98	B
4,4'-DDE	0.000	11/27/98	C
4,4'-DDE	0.000	11/27/98	D
4,4'-DDE	0.000	11/27/98	F
4,4'-DDE	0.000	11/27/98	FB
4,4'-DDE	0.000	11/30/98	A
4,4'-DDE	0.000	11/30/98	B
4,4'-DDE	0.000	11/30/98	C
4,4'-DDE	0.000	11/30/98	D
4,4'-DDE	0.000	11/30/98	E
4,4'-DDE	0.000	11/30/98	F
4,4'-DDE	0.000	12/3/98	A
4,4'-DDE	0.000	12/3/98	B
4,4'-DDE	0.000	12/3/98	C
4,4'-DDE	0.000	12/3/98	D
4,4'-DDE	0.000	12/3/98	F

Summary of Laboratory Analytical Results
Pesticides and Polychlorinated Biphenyls
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Result	Date Sampled	Station
4,4'-DDE	0.000	12/6/98	A
4,4'-DDE	0.000	12/6/98	B
4,4'-DDE	0.000	12/6/98	C
4,4'-DDE	0.000	12/6/98	D
4,4'-DDE	0.000	12/6/98	F
4,4'-DDE	0.000	12/9/98	A
4,4'-DDE	0.000	12/9/98	B
4,4'-DDE	0.000	12/9/98	C
4,4'-DDE	0.000	12/9/98	D
4,4'-DDE	0.000	12/9/98	F
4,4'-DDE	0.000	12/12/98	A
4,4'-DDE	0.000	12/12/98	B
4,4'-DDE	0.000	12/12/98	C
4,4'-DDE	0.000	12/12/98	D
4,4'-DDE	0.000	12/12/98	E
4,4'-DDE	0.000	12/12/98	F
4,4'-DDE	0.000	12/12/98	FB
4,4'-DDE	0.000	12/15/98	A
4,4'-DDE	0.000	12/15/98	B
4,4'-DDE	0.000	12/15/98	C
4,4'-DDE	0.000	12/15/98	D
4,4'-DDE	0.000	12/15/98	E
4,4'-DDE	0.000	12/15/98	F
4,4'-DDE	0.000	12/18/98	A
4,4'-DDE	0.000	12/18/98	B
4,4'-DDE	0.000	12/18/98	C

**Summary of Laboratory Analytical Results
Pesticides and Polychlorinated Biphenyls
(Measured in ug/m3)
Fourth Quarter 1998**

Compound	Result	Date Sampled	Station
4,4'-DDE	0.000	12/18/98	D
4,4'-DDE	0.000	12/18/98	F
4,4'-DDE	0.000	12/18/98	FB
4,4'-DDE	0.000	12/21/98	A
4,4'-DDE	0.000	12/21/98	B
4,4'-DDE	0.000	12/21/98	C
4,4'-DDE	0.000	12/21/98	D
4,4'-DDE	0.000	12/21/98	E
4,4'-DDE	0.000	12/21/98	F
4,4'-DDE	0.000	12/21/98	FB
4,4'-DDE	0.000	12/27/98	A
4,4'-DDE	0.000	12/27/98	B
4,4'-DDE	0.000	12/27/98	C
4,4'-DDE	0.000	12/27/98	D
4,4'-DDE	0.000	12/27/98	E
4,4'-DDE	0.000	12/27/98	F
4,4'-DDE	0.000	12/30/98	A
4,4'-DDE	0.000	12/30/98	B
4,4'-DDE	0.000	12/30/98	C
4,4'-DDE	0.000	12/30/98	D
4,4'-DDE	0.000	12/30/98	F
4,4'-DDE	0.000	12/30/98	FB
4,4'-DDT	0.000	10/1/98	A
4,4'-DDT	0.000	10/1/98	B
4,4'-DDT	0.000	10/1/98	C
4,4'-DDT	0.000	10/1/98	D

Summary of Laboratory Analytical Results
Pesticides and Polychlorinated Biphenyls
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Result	Date Sampled	Station
4,4'-DDT	0.000	10/1/98	E
4,4'-DDT	0.000	10/1/98	F
4,4'-DDT	0.000	10/4/98	A
4,4'-DDT	0.000	10/4/98	B
4,4'-DDT	0.000	10/4/98	C
4,4'-DDT	0.000	10/4/98	D
4,4'-DDT	0.000	10/4/98	F
4,4'-DDT	0.000	10/4/98	FB
4,4'-DDT	0.000	10/7/98	A
4,4'-DDT	0.000	10/7/98	B
4,4'-DDT	0.000	10/7/98	C
4,4'-DDT	0.000	10/7/98	D
4,4'-DDT	0.000	10/7/98	E
4,4'-DDT	0.000	10/7/98	F
4,4'-DDT	0.000	10/7/98	FB
4,4'-DDT	0.000	10/10/98	A
4,4'-DDT	0.000	10/10/98	B
4,4'-DDT	0.000	10/10/98	C
4,4'-DDT	0.000	10/10/98	D
4,4'-DDT	0.000	10/10/98	E
4,4'-DDT	0.000	10/10/98	F
4,4'-DDT	0.000	10/13/98	A
4,4'-DDT	0.000	10/13/98	B
4,4'-DDT	0.000	10/13/98	C
4,4'-DDT	0.000	10/13/98	D
4,4'-DDT	0.000	10/13/98	F

**Summary of Laboratory Analytical Results
Pesticides and Polychlorinated Biphenyls
(Measured in ug/m3)
Fourth Quarter 1998**

Compound	Result	Date Sampled	Station
4,4'-DDT	0.000	10/13/98	FB
4,4'-DDT	0.000	10/16/98	A
4,4'-DDT	0.000	10/16/98	B
4,4'-DDT	0.000	10/16/98	C
4,4'-DDT	0.000	10/16/98	D
4,4'-DDT	0.000	10/16/98	E
4,4'-DDT	0.000	10/16/98	F
4,4'-DDT	0.000	10/16/98	FB
4,4'-DDT	0.000	10/22/98	A
4,4'-DDT	0.000	10/22/98	B
4,4'-DDT	0.000	10/22/98	C
4,4'-DDT	0.000	10/22/98	D
4,4'-DDT	0.000	10/22/98	F
4,4'-DDT	0.000	10/22/98	FB
4,4'-DDT	0.000	10/25/98	A
4,4'-DDT	0.000	10/25/98	B
4,4'-DDT	0.000	10/25/98	C
4,4'-DDT	0.000	10/25/98	D
4,4'-DDT	0.000	10/25/98	E
4,4'-DDT	0.000	10/25/98	F
4,4'-DDT	0.000	10/25/98	FB
4,4'-DDT	0.000	10/28/98	A
4,4'-DDT	0.000	10/28/98	B
4,4'-DDT	0.000	10/28/98	C
4,4'-DDT	0.000	10/28/98	D
4,4'-DDT	0.000	10/28/98	E

Summary of Laboratory Analytical Results
Pesticides and Polychlorinated Biphenyls
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Result	Date Sampled	Station
4,4'-DDT	0.000	10/28/98	F
4,4'-DDT	0.000	10/31/98	A
4,4'-DDT	0.000	10/31/98	B
4,4'-DDT	0.000	10/31/98	C
4,4'-DDT	0.000	10/31/98	D
4,4'-DDT	0.000	10/31/98	F
4,4'-DDT	0.000	10/31/98	FB
4,4'-DDT	0.000	11/3/98	A
4,4'-DDT	0.000	11/3/98	B
4,4'-DDT	0.000	11/3/98	C
4,4'-DDT	0.000	11/3/98	D
4,4'-DDT	0.000	11/3/98	F
4,4'-DDT	0.000	11/3/98	FB
4,4'-DDT	0.000	11/6/98	A
4,4'-DDT	0.000	11/6/98	B
4,4'-DDT	0.000	11/6/98	C
4,4'-DDT	0.000	11/6/98	D
4,4'-DDT	0.000	11/6/98	E
4,4'-DDT	0.000	11/6/98	F
4,4'-DDT	0.000	11/9/98	A
4,4'-DDT	0.000	11/9/98	B
4,4'-DDT	0.000	11/9/98	C
4,4'-DDT	0.000	11/9/98	D
4,4'-DDT	0.000	11/9/98	E
4,4'-DDT	0.000	11/9/98	F
4,4'-DDT	0.000	11/9/98	FB

Summary of Laboratory Analytical Results
Pesticides and Polychlorinated Biphenyls
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Result	Date Sampled	Station
4,4'-DDT	0.000	11/12/98	A
4,4'-DDT	0.000	11/12/98	B
4,4'-DDT	0.000	11/12/98	C
4,4'-DDT	0.000	11/12/98	D
4,4'-DDT	0.000	11/12/98	E
4,4'-DDT	0.000	11/12/98	F
4,4'-DDT	0.000	11/12/98	FB
4,4'-DDT	0.000	11/15/98	A
4,4'-DDT	0.000	11/15/98	B
4,4'-DDT	0.000	11/15/98	C
4,4'-DDT	0.000	11/15/98	D
4,4'-DDT	0.000	11/15/98	E
4,4'-DDT	0.000	11/15/98	F
4,4'-DDT	0.000	11/15/98	FB
4,4'-DDT	0.000	11/18/98	A
4,4'-DDT	0.000	11/18/98	B
4,4'-DDT	0.000	11/18/98	C
4,4'-DDT	0.000	11/18/98	D
4,4'-DDT	0.000	11/18/98	F
4,4'-DDT	0.000	11/18/98	FB
4,4'-DDT	0.000	11/21/98	A
4,4'-DDT	0.000	11/21/98	B
4,4'-DDT	0.000	11/21/98	C
4,4'-DDT	0.000	11/21/98	D
4,4'-DDT	0.000	11/21/98	E
4,4'-DDT	0.000	11/21/98	F

Summary of Laboratory Analytical Results
Pesticides and Polychlorinated Biphenyls
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Result	Date Sampled	Station
4,4'-DDT	0.000	11/21/98	FB
4,4'-DDT	0.000	11/24/98	A
4,4'-DDT	0.000	11/24/98	B
4,4'-DDT	0.000	11/24/98	C
4,4'-DDT	0.000	11/24/98	D
4,4'-DDT	0.000	11/24/98	E
4,4'-DDT	0.000	11/24/98	F
4,4'-DDT	0.000	11/27/98	A
4,4'-DDT	0.000	11/27/98	B
4,4'-DDT	0.000	11/27/98	C
4,4'-DDT	0.000	11/27/98	D
4,4'-DDT	0.000	11/27/98	F
4,4'-DDT	0.000	11/27/98	FB
4,4'-DDT	0.000	11/30/98	A
4,4'-DDT	0.000	11/30/98	B
4,4'-DDT	0.000	11/30/98	C
4,4'-DDT	0.000	11/30/98	D
4,4'-DDT	0.000	11/30/98	E
4,4'-DDT	0.000	11/30/98	F
4,4'-DDT	0.000	12/3/98	A
4,4'-DDT	0.000	12/3/98	B
4,4'-DDT	0.000	12/3/98	C
4,4'-DDT	0.000	12/3/98	D
4,4'-DDT	0.000	12/3/98	F
4,4'-DDT	0.000	12/6/98	A
4,4'-DDT	0.000	12/6/98	B

**Summary of Laboratory Analytical Results
Pesticides and Polychlorinated Biphenyls
(Measured in ug/m3)
Fourth Quarter 1998**

Compound	Result	Date Sampled	Station
4,4'-DDT	0.000	12/6/98	C
4,4'-DDT	0.000	12/6/98	D
4,4'-DDT	0.000	12/6/98	F
4,4'-DDT	0.000	12/9/98	A
4,4'-DDT	0.000	12/9/98	B
4,4'-DDT	0.000	12/9/98	C
4,4'-DDT	0.000	12/9/98	D
4,4'-DDT	0.000	12/9/98	F
4,4'-DDT	0.000	12/12/98	A
4,4'-DDT	0.000	12/12/98	B
4,4'-DDT	0.000	12/12/98	C
4,4'-DDT	0.000	12/12/98	D
4,4'-DDT	0.000	12/12/98	E
4,4'-DDT	0.000	12/12/98	F
4,4'-DDT	0.000	12/12/98	FB
4,4'-DDT	0.000	12/15/98	A
4,4'-DDT	0.000	12/15/98	B
4,4'-DDT	0.000	12/15/98	C
4,4'-DDT	0.000	12/15/98	D
4,4'-DDT	0.000	12/15/98	E
4,4'-DDT	0.000	12/15/98	F
4,4'-DDT	0.000	12/18/98	A
4,4'-DDT	0.000	12/18/98	B
4,4'-DDT	0.000	12/18/98	C
4,4'-DDT	0.000	12/18/98	D
4,4'-DDT	0.000	12/18/98	F

**Summary of Laboratory Analytical Results
Pesticides and Polychlorinated Biphenyls
(Measured in ug/m3)
Fourth Quarter 1998**

Compound	Result	Date Sampled	Station
4,4'-DDT	0.000	12/18/98	FB
4,4'-DDT	0.000	12/21/98	A
4,4'-DDT	0.000	12/21/98	B
4,4'-DDT	0.000	12/21/98	C
4,4'-DDT	0.000	12/21/98	D
4,4'-DDT	0.000	12/21/98	E
4,4'-DDT	0.000	12/21/98	F
4,4'-DDT	0.000	12/21/98	FB
4,4'-DDT	0.000	12/27/98	A
4,4'-DDT	0.000	12/27/98	B
4,4'-DDT	0.000	12/27/98	C
4,4'-DDT	0.000	12/27/98	D
4,4'-DDT	0.000	12/27/98	E
4,4'-DDT	0.000	12/27/98	F
4,4'-DDT	0.000	12/30/98	A
4,4'-DDT	0.000	12/30/98	B
4,4'-DDT	0.000	12/30/98	C
4,4'-DDT	0.000	12/30/98	D
4,4'-DDT	0.000	12/30/98	F
4,4'-DDT	0.000	12/30/98	FB
ALDRIN	0.000	10/1/98	A
ALDRIN	0.000	10/1/98	B
ALDRIN	0.000	10/1/98	C
ALDRIN	0.000	10/1/98	D
ALDRIN	0.000	10/1/98	E
ALDRIN	0.000	10/1/98	F

Summary of Laboratory Analytical Results
Pesticides and Polychlorinated Biphenyls
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Result	Date Sampled	Station
ALDRIN	0.000	10/4/98	A
ALDRIN	0.000	10/4/98	B
ALDRIN	0.000	10/4/98	C
ALDRIN	0.000	10/4/98	D
ALDRIN	0.000	10/4/98	F
ALDRIN	0.000	10/4/98	FB
ALDRIN	0.000	10/7/98	A
ALDRIN	0.000	10/7/98	B
ALDRIN	0.000	10/7/98	C
ALDRIN	0.000	10/7/98	D
ALDRIN	0.000	10/7/98	E
ALDRIN	0.000	10/7/98	F
ALDRIN	0.000	10/7/98	FB
ALDRIN	0.000	10/10/98	A
ALDRIN	0.000	10/10/98	B
ALDRIN	0.000	10/10/98	C
ALDRIN	0.000	10/10/98	D
ALDRIN	0.000	10/10/98	E
ALDRIN	0.000	10/10/98	F
ALDRIN	0.000	10/13/98	A
ALDRIN	0.000	10/13/98	B
ALDRIN	0.000	10/13/98	C
ALDRIN	0.000	10/13/98	D
ALDRIN	0.000	10/13/98	F
ALDRIN	0.000	10/13/98	FB
ALDRIN	0.000	10/16/98	A

Summary of Laboratory Analytical Results
Pesticides and Polychlorinated Biphenyls
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Result	Date Sampled	Station
ALDRIN	0.000	10/16/98	B
ALDRIN	0.000	10/16/98	C
ALDRIN	0.000	10/16/98	D
ALDRIN	0.000	10/16/98	E
ALDRIN	0.000	10/16/98	F
ALDRIN	0.000	10/16/98	FB
ALDRIN	0.000	10/22/98	A
ALDRIN	0.000	10/22/98	B
ALDRIN	0.000	10/22/98	C
ALDRIN	0.000	10/22/98	D
ALDRIN	0.000	10/22/98	F
ALDRIN	0.000	10/22/98	FB
ALDRIN	0.000	10/25/98	A
ALDRIN	0.000	10/25/98	B
ALDRIN	0.000	10/25/98	C
ALDRIN	0.000	10/25/98	D
ALDRIN	0.000	10/25/98	E
ALDRIN	0.000	10/25/98	F
ALDRIN	0.000	10/25/98	FB
ALDRIN	0.000	10/28/98	A
ALDRIN	0.000	10/28/98	B
ALDRIN	0.000	10/28/98	C
ALDRIN	0.000	10/28/98	D
ALDRIN	0.000	10/28/98	E
ALDRIN	0.000	10/28/98	F
ALDRIN	0.000	10/31/98	A

Summary of Laboratory Analytical Results
Pesticides and Polychlorinated Biphenyls
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Result	Date Sampled	Station
ALDRIN	0.000	10/31/98	B
ALDRIN	0.000	10/31/98	C
ALDRIN	0.000	10/31/98	D
ALDRIN	0.000	10/31/98	F
ALDRIN	0.000	10/31/98	FB
ALDRIN	0.000	11/3/98	A
ALDRIN	0.000	11/3/98	B
ALDRIN	0.000	11/3/98	C
ALDRIN	0.000	11/3/98	D
ALDRIN	0.000	11/3/98	F
ALDRIN	0.000	11/3/98	FB
ALDRIN	0.000	11/6/98	A
ALDRIN	0.000	11/6/98	B
ALDRIN	0.000	11/6/98	C
ALDRIN	0.000	11/6/98	D
ALDRIN	0.000	11/6/98	E
ALDRIN	0.000	11/6/98	F
ALDRIN	0.000	11/9/98	A
ALDRIN	0.000	11/9/98	B
ALDRIN	0.000	11/9/98	C
ALDRIN	0.000	11/9/98	D
ALDRIN	0.000	11/9/98	E
ALDRIN	0.000	11/9/98	F
ALDRIN	0.000	11/9/98	FB
ALDRIN	0.000	11/12/98	A
ALDRIN	0.000	11/12/98	B

**Summary of Laboratory Analytical Results
Pesticides and Polychlorinated Biphenyls
(Measured in ug/m3)
Fourth Quarter 1998**

Compound	Result	Date Sampled	Station
ALDRIN	0.000	11/12/98	C
ALDRIN	0.000	11/12/98	D
ALDRIN	0.000	11/12/98	E
ALDRIN	0.000	11/12/98	F
ALDRIN	0.000	11/12/98	FB
ALDRIN	0.000	11/15/98	A
ALDRIN	0.000	11/15/98	B
ALDRIN	0.000	11/15/98	C
ALDRIN	0.000	11/15/98	D
ALDRIN	0.000	11/15/98	E
ALDRIN	0.000	11/15/98	F
ALDRIN	0.000	11/15/98	FB
ALDRIN	0.000	11/18/98	A
ALDRIN	0.000	11/18/98	B
ALDRIN	0.000	11/18/98	C
ALDRIN	0.000	11/18/98	D
ALDRIN	0.000	11/18/98	F
ALDRIN	0.000	11/18/98	FB
ALDRIN	0.000	11/21/98	A
ALDRIN	0.000	11/21/98	B
ALDRIN	0.000	11/21/98	C
ALDRIN	0.000	11/21/98	D
ALDRIN	0.000	11/21/98	E
ALDRIN	0.000	11/21/98	F
ALDRIN	0.000	11/21/98	FB
ALDRIN	0.000	11/24/98	A

Summary of Laboratory Analytical Results
Pesticides and Polychlorinated Biphenyls
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Result	Date Sampled	Station
ALDRIN	0.000	11/24/98	B
ALDRIN	0.000	11/24/98	C
ALDRIN	0.000	11/24/98	D
ALDRIN	0.000	11/24/98	E
ALDRIN	0.000	11/24/98	F
ALDRIN	0.000	11/27/98	A
ALDRIN	0.000	11/27/98	B
ALDRIN	0.000	11/27/98	C
ALDRIN	0.000	11/27/98	D
ALDRIN	0.000	11/27/98	F
ALDRIN	0.000	11/27/98	FB
ALDRIN	0.000	11/30/98	A
ALDRIN	0.000	11/30/98	B
ALDRIN	0.000	11/30/98	C
ALDRIN	0.000	11/30/98	D
ALDRIN	0.000	11/30/98	E
ALDRIN	0.000	11/30/98	F
ALDRIN	0.000	12/3/98	A
ALDRIN	0.000	12/3/98	B
ALDRIN	0.000	12/3/98	C
ALDRIN	0.000	12/3/98	D
ALDRIN	0.000	12/3/98	F
ALDRIN	0.000	12/6/98	A
ALDRIN	0.000	12/6/98	B
ALDRIN	0.000	12/6/98	C
ALDRIN	0.000	12/6/98	D

Summary of Laboratory Analytical Results
Pesticides and Polychlorinated Biphenyls
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Result	Date Sampled	Station
ALDRIN	0.000	12/6/98	F
ALDRIN	0.000	12/9/98	A
ALDRIN	0.000	12/9/98	B
ALDRIN	0.000	12/9/98	C
ALDRIN	0.000	12/9/98	D
ALDRIN	0.000	12/9/98	F
ALDRIN	0.000	12/12/98	A
ALDRIN	0.000	12/12/98	B
ALDRIN	0.000	12/12/98	C
ALDRIN	0.000	12/12/98	D
ALDRIN	0.000	12/12/98	E
ALDRIN	0.000	12/12/98	F
ALDRIN	0.000	12/12/98	FB
ALDRIN	0.000	12/15/98	A
ALDRIN	0.000	12/15/98	B
ALDRIN	0.000	12/15/98	C
ALDRIN	0.000	12/15/98	D
ALDRIN	0.000	12/15/98	E
ALDRIN	0.000	12/15/98	F
ALDRIN	0.000	12/18/98	A
ALDRIN	0.000	12/18/98	B
ALDRIN	0.000	12/18/98	C
ALDRIN	0.000	12/18/98	D
ALDRIN	0.000	12/18/98	F
ALDRIN	0.000	12/18/98	FB
ALDRIN	0.000	12/21/98	A

Summary of Laboratory Analytical Results
Pesticides and Polychlorinated Biphenyls
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Result	Date Sampled	Station
ALDRIN	0.000	12/21/98	B
ALDRIN	0.000	12/21/98	C
ALDRIN	0.000	12/21/98	D
ALDRIN	0.000	12/21/98	E
ALDRIN	0.000	12/21/98	F
ALDRIN	0.000	12/21/98	FB
ALDRIN	0.000	12/27/98	A
ALDRIN	0.000	12/27/98	B
ALDRIN	0.000	12/27/98	C
ALDRIN	0.000	12/27/98	D
ALDRIN	0.000	12/27/98	E
ALDRIN	0.000	12/27/98	F
ALDRIN	0.000	12/30/98	A
ALDRIN	0.000	12/30/98	B
ALDRIN	0.000	12/30/98	C
ALDRIN	0.000	12/30/98	D
ALDRIN	0.000	12/30/98	F
ALDRIN	0.000	12/30/98	FB
AROCLOR 1242	0.001	10/1/98	A
AROCLOR 1242	0.001	10/1/98	B
AROCLOR 1242	0.001	10/1/98	C
AROCLOR 1242	0.001	10/1/98	D
AROCLOR 1242	0.001	10/1/98	E
AROCLOR 1242	0.001	10/1/98	F
AROCLOR 1242	0.001	10/4/98	A
AROCLOR 1242	0.001	10/4/98	B

**Summary of Laboratory Analytical Results
Pesticides and Polychlorinated Biphenyls
(Measured in ug/m3)
Fourth Quarter 1998**

Compound	Result	Date Sampled	Station
AROCLOR 1242	0.001	10/4/98	C
AROCLOR 1242	0.001	10/4/98	D
AROCLOR 1242	0.001	10/4/98	F
AROCLOR 1242	0.001	10/4/98	FB
AROCLOR 1242	0.001	10/7/98	A
AROCLOR 1242	0.001	10/7/98	B
AROCLOR 1242	0.001	10/7/98	C
AROCLOR 1242	0.001	10/7/98	D
AROCLOR 1242	0.001	10/7/98	E
AROCLOR 1242	0.001	10/7/98	F
AROCLOR 1242	0.001	10/7/98	FB
AROCLOR 1242	0.001	10/10/98	A
AROCLOR 1242	0.001	10/10/98	B
AROCLOR 1242	0.001	10/10/98	C
AROCLOR 1242	0.001	10/10/98	D
AROCLOR 1242	0.001	10/10/98	E
AROCLOR 1242	0.001	10/10/98	F
AROCLOR 1242	0.001	10/13/98	A
AROCLOR 1242	0.001	10/13/98	B
AROCLOR 1242	0.001	10/13/98	C
AROCLOR 1242	0.001	10/13/98	D
AROCLOR 1242	0.001	10/13/98	F
AROCLOR 1242	0.001	10/13/98	FB
AROCLOR 1242	0.001	10/16/98	A
AROCLOR 1242	0.001	10/16/98	B
AROCLOR 1242	0.001	10/16/98	C

Summary of Laboratory Analytical Results
Pesticides and Polychlorinated Biphenyls
(Measured in ug/m3)
Fourth Quarter 1998

Compound	Result	Date Sampled	Station
AROCLOR 1242	0.001	10/16/98	D
AROCLOR 1242	0.001	10/16/98	E
AROCLOR 1242	0.001	10/16/98	F
AROCLOR 1242	0.001	10/16/98	FB
AROCLOR 1242	0.001	10/22/98	A
AROCLOR 1242	0.001	10/22/98	B
AROCLOR 1242	0.001	10/22/98	C
AROCLOR 1242	0.001	10/22/98	D
AROCLOR 1242	0.001	10/22/98	F
AROCLOR 1242	0.001	10/22/98	FB
AROCLOR 1242	0.001	10/25/98	A
AROCLOR 1242	0.001	10/25/98	B
AROCLOR 1242	0.001	10/25/98	C
AROCLOR 1242	0.001	10/25/98	D
AROCLOR 1242	0.001	10/25/98	E
AROCLOR 1242	0.001	10/25/98	F
AROCLOR 1242	0.001	10/25/98	FB
AROCLOR 1242	0.001	10/28/98	A
AROCLOR 1242	0.001	10/28/98	B
AROCLOR 1242	0.001	10/28/98	C
AROCLOR 1242	0.001	10/28/98	D
AROCLOR 1242	0.001	10/28/98	E
AROCLOR 1242	0.001	10/28/98	F
AROCLOR 1242	0.001	10/31/98	A
AROCLOR 1242	0.001	10/31/98	B
AROCLOR 1242	0.001	10/31/98	C